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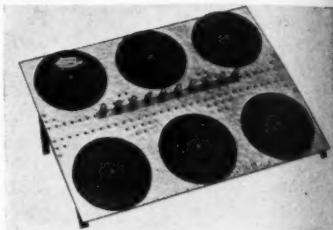
Dr. Claude Shannon, a research mathematician for Bell Telephone Laboratories, a research associate at MIT. His books include Communication theory and the recent volume "Automation Studies" on the theory of robot construction. He has prepared a paper entitled "A Symbolic Analysis of Relay and Switching Circuits" available in the **GENIAC**. Covers basic theory necessary for advanced circuit design, it vastly extends the range of our kit.

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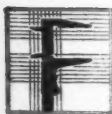


“... BUT

DIVIDED

WE

FALL!”



FRANCE appears to be pretty well finished as a major nation; the rate of turnover of governments has been so high as to make accomplishment inherently impossible. And it's quite evident that the French have no intention of doing anything to alter the situation which causes the rapid turnover. They like it that way.*

I think the fundamental cause of the trouble can be outlined fairly clearly. No sane entity will sacrifice any value without hope of or expectation of reward. A puppy can chase its tail quite sanely; there's no hope of catching his tail, of course, but there is the reward of exercise, improved neuro-muscular co-ordination, et cetera. For intelligent entities, it is necessary that a reward of value greater than the expenditure in-

involved in attaining it be predictable.

This is, of course, a broader statement of the fundamental rationality of the much-demeaned "profit motive." Demean that motive sufficiently, and you make nonsense of a good bit of basic philosophy, such as "What does it profit a man if he gain the world, and he lose his own soul?" Any criminal thinks he has the answer to that one.

But it's quite evident that an animal that expends more energy gathering food—fuel—than that food yields will, shortly, be an inoperative organism.

So long as the law of Conservation of Energy maintains, you can't get something for nothing—and you can't *do* something for nothing.

*This editorial was written two weeks before the deGaulle crisis.—J.W.C., Jr.

Then no sane entity will accept sacrifice of real value, unless it can predict at least equal value in return.

In France, currently, there are so many separate groups that forming a government is extremely difficult. No one of the groups is sufficiently insane to be willing to sacrifice real values for no-predictable-value in return.

Of course, any sane entity will sacrifice a lesser value to win a greater one; new lamps for old has always been at attractive offer . . . and sacrificing an old one for a new one is a valid operation, provided the old one doesn't happen to be Aladdin's magical type.

But no sane entity will sacrifice that which it holds to be the highest-possible-value for any other.

The trouble in France is quite simple; each of the separate groups holds that its plans constitute the highest-possible-value. That makes it impossible for them to sacrifice any of their plans for any other reward possible. No compromise is possible in such a situation; if a man's personal plans constitute the highest-possible-value in his conception, then, obviously, there's nothing he will not sacrifice for them, and nothing for which he will sacrifice them.

The early martyrs present precisely such a picture; it's quite evident that self-preservation is *not* the first—highest—law of human nature, for the martyrs willingly sacrificed life rather than compromise their beliefs.

Anyone who thinks that Life, Liberty and the Pursuit of Happiness are

absolute, highest-possible-values is in for trouble. If Life is an absolute value, then it can not be risked, for no possible reward can pay for that risk. Since any action, or even inaction, entails risk of life, you'd be in something of a spot if you actually held that philosophy. And since membership in any group entails some sacrifice of freedom of action, unless you can conceive of some reward higher than Liberty, you're going to have to be a hermit.

And if Pursuit of Happiness be too narrowly interpreted, even temporary discomfort becomes impossible. You can't get much done, that way . . .

The essential trouble with France seems to be quite simply that there is no common purpose, no common ideal, for which all of the dissident groups can sacrifice their separate plans; there is no common Higher Purpose. And that simply means that there is no France any more—save in a geographical sense. If France-as-an-entity were sufficiently important to the various groups, each would be able to sacrifice something of its individual plans for the reward of that higher, common purpose.

The United Nations won't be a true entity until each of the dissident nations of the planet can accept as a value *greater to itself, in its own terms*, something more important than its own national existence.

Then, and only then, can the nations of the Earth compromise their differences in the true and meaning-

(Continued on page 157)

"...BUT DIVIDED WE FALL!"



IRAM TAINÉ came awake and sat up in his bed.

Towser was barking and scratching at the floor.

"Shut up," Taine told the dog.

Towser cocked quizzical ears at him and then resumed the barking and scratching at the floor.

Taine rubbed his eyes. He ran a hand through his rat's-nest head of hair. He considered lying down again and pulling up the covers.

But not with Towser barking.

"What's the matter with you, anyhow?" he asked of Towser, with not a little wrath.

"*Whuff*," said Towser, industrious-

ly proceeding with his scratching at the floor.

"If you want out," said Taine, "all you got to do is open the screen door. You know how it is done. You do it all the time."

Towser quit his barking and sat down heavily, watching his master getting out of bed.

Taine put on his shirt and pulled on his trousers, but didn't bother with his shoes.

Towser ambled over to a corner, put his nose down to the baseboard and snuffled moistly.

"You got a mouse?" asked Taine.

"*Whuff*," said Towser, most emphatically.

"I can't ever remember you mak-

...BIG FRONT YARD

BY CLIFFORD D. SIMAK

It takes a very special kind of trader to recognize that one small door is big enough for entrance to an unlimited realm....

Illustrated by Freaa



ing such a row about a mouse," Taine said, slightly puzzled. "You must be off your rocker."

It was a beautiful summer morning. Sunlight was pouring through the open window.

Good day for fishing, Taine told himself, then remembered that there'd be no fishing, for he had to go out and look up that old four-poster maple bed that he had heard about up Woodman way. More than likely, he thought, they'd want twice as much as it was worth. It was getting so, he told himself, that a man couldn't make an honest dollar. Everyone was getting smart about antiques.

He got up off the bed and headed for the living room.

"Come on," he said to Towser.

Towser came along, pausing now and then to snuffle into corners and to whuffle at the floor.

"You got it bad," said Taine.

Maybe it's a rat, he thought. The house was getting old.

He opened the screen door and Towser went outside.

"Leave that woodchuck be today," Taine advised him. "It's a losing battle. You'll never dig him out."

Towser went around the corner of the house.

Taine noticed that something had happened to the sign that hung on the post beside the driveway. One of the chains had become unhooked and the sign was dangling.

He padded out across the driveway slab and the grass, still wet with dew, to fix the sign. There was nothing wrong with it—just the un-

hooked chain. Might have been the wind, he thought, or some passing urchin. Although probably not an urchin. He got along with kids. They never bothered him, like they did some others in the village. Banker Stevens, for example. They were always pestering Stevens.

He stood back a ways to be sure the sign was straight.

It read, in big letters:

HANDY MAN

And under that, in smaller lettering:

I Fix Anything

And under that:

ANTIQUES FOR SALE

What have you got to trade?

Maybe, he told himself, he'd ought to have two signs, one for his fix-it shop and one for antiques and trading. Some day, when he had the time, he thought, he'd paint a couple of new ones. One for each side of the driveway. It would look neat that way.

He turned around and looked across the road at Turner's Woods. It was a pretty sight, he thought. A sizable piece of woods like that right at the edge of town. It was a place for birds and rabbits and woodchucks and squirrels and it was full of forts built through generations by the boys of Willow Bend.

Some day, of course, some smart operator would buy it up and start a housing development or something equally objectionable and when that happened a big slice of his own boyhood would be cut out of his life.

Towser came around the corner of the house. He was sidling along, sniffing at the lowest row of siding and his ears were cocked with interest.

"That dog is nuts," said Taine, and went inside.

He went into the kitchen, his bare feet slapping on the floor.

He filled the tea kettle, set it on the stove and turned the burner on underneath the kettle.

He turned on the radio, forgetting that it was out of kilter.

When it didn't make a sound, he remembered and, disgusted, snapped it off. That was the way it went, he thought. He fixed other people's stuff, but never got around to fixing any of his own.

He went into the bedroom and put on his shoes. He threw the bed together.

Back in the kitchen the stove had failed to work again. The burner beneath the kettle still was cold.

Taine hauled off and kicked the stove. He lifted the kettle and held his palm above the burner. In a few seconds he could detect some heat.

"Worked again," he told himself.

Some day, he knew, kicking the stove would fail to work. When that happened, he'd have to get to work on it. Probably wasn't more than a loose connection.

He put the kettle back onto the stove.

There was a clatter out in front and Taine went out to see what was going on.

Beasly, the Horton's yardboy-chauf-

feur-gardener-et cetera, was backing a rickety old truck up the driveway. Beside him sat Abbie Horton, the wife of H. Henry Horton, the village's most important citizen. In the back of the truck, lashed on with ropes and half-protected by a garish red and purple quilt, stood a mammoth television set. Taine recognized it from of old. It was a good ten years out of date and still, by any standard, it was the most expensive set ever to grace any home in Willow Bend.

Abbie hopped out of the truck. She was an energetic, bustling, bossy woman.

"Good morning, Hiram," she said. "Can you fix this set again?"

"Never saw anything that I couldn't fix," said Taine, but nevertheless he eyed the set with something like dismay. It was not the first time he had tangled with it and he knew what was ahead.

"It might cost you more than it's worth," he warned her. "What you really need is a new one. This set is getting old and—"

"That's just what Henry said," Abbie told him, tartly. "Henry wants to get one of the color sets. But I won't part with this one. It's not just TV, you know. It's a combination, with radio and a record player and the wood and style are just right for the other furniture, and, besides—"

"Yes, I know," said Taine, who'd heard it all before.

Poor old Henry, he thought. What a life the man must lead. Up at that computer plant all day long, shooting off his face and bossing everyone,

then coming home to a life of petty tyranny.

"Beasly," said Abbie, in her best drill-sergeant voice, "you get right up there and get that thing untied."

"Yes'm," Beasly said. He was a gangling, loose-jointed man who didn't look too bright.

"And see you be careful with it. I don't want it all scratched up."

"Yes'm," said Beasly.

"I'll help," Taine offered.

The two climbed into the truck and began unlashng the old monstrosity.

"It's heavy," Abbie warned. "You two be careful of it."

"Yes'm," said Beasly.

It was heavy and it was an awkward thing to boot, but Beasly and Taine horsed it around to the back of the house and up the stoop and through the back door and down the basement stairs, with Abbie following eagle-eyed behind them, alert to the slightest scratch.

The basement was Taine's combination workshop and display room for antiques. One end of it was filled with benches and with tools and machinery and boxes full of odds and ends and piles of just plain junk were scattered everywhere. The other end housed a collection of rickety chairs, sagging bedposts, ancient highboys, equally ancient lowboys, old coal scuttles painted gold, heavy iron fireplace screens and a lot of other stuff that he had collected from far and wide for as little as he could possibly pay for it.

He and Beasly set the TV down carefully on the floor. Abbie watched them narrowly from the stairs.

"Why, Hiram," she said, excited, "you put a ceiling in the basement. It looks a whole lot better."

"Huh?" asked Taine.

"The ceiling. I said you put in a ceiling."

Taine jerked his head up and what she said was true. There was a ceiling there, but he'd never put it in.

He gulped a little and lowered his head, then jerked it quickly up and had another look. The ceiling still was there.

"It's not that block stuff," said Abbie with open admiration. "You can't see any joints at all. How did you manage it?"

Taine gulped again and got back his voice. "Something I thought up," he told her weakly.

"You'll have to come over and do it to our basement. Our basement is a sight. Beasly put the ceiling in the amusement room, but Beasly is all thumbs."

"Yes'm," Beasly said contritely.

"When I get the time," Taine promised, ready to promise anything to get them out of there.

"You'd have a lot more time," Abbie told him acidly, "if you weren't gadding around all over the country buying up that broken-down old furniture that you call antiques. Maybe you can fool the city folks when they come driving out here, but you can't fool me."

"I make a lot of money out of some of it," Taine told her calmly.

ASTOUNDING SCIENCE FICTION

"And lose your shirt on the rest of it," she said.

"I got some old china that is just the kind of stuff you are looking for," said Taine. "Picked it up just a day or two ago. Made a good buy on it. I can let you have it cheap."

"I'm not interested," she said and clamped her mouth tight shut.

She turned around and went back up the stairs.

"She's on the prod today," Beasley said to Taine. "It will be a bad day. It always is when she starts early in the morning."

"Don't pay attention to her," Taine advised.

"I try not to, but it ain't possible. You sure you don't need a man? I'd work for you cheap."

"Sorry, Beasley. Tell you what—come over some night soon and we'll play some checkers."

"I'll do that, Hiram. You're the only one who ever asks me over. All the others ever do is laugh at me or shout."

Abbie's voice came bellowing down the stairs. "Beasley, are you coming? Don't go standing there all day. I have rugs to beat."

"Yes'm," said Beasley, starting up the stairs.

At the truck, Abbie turned on Taine with determination: "You'll get that set fixed right away? I'm lost without it."

"Immediately," said Taine.

He stood and watched them off, then looked around for Towser, but the dog had disappeared. More than

likely he was at that woodchuck hole again, in the woods across the road. Gone off, thought Taine, without his breakfast, too.

The tea kettle was boiling furiously when Taine got back to the kitchen. He put coffee in the maker and poured in the water. Then he went downstairs.

The ceiling still was there.

He turned on all the lights and walked around the basement, staring up at it.

It was a dazzling white material and it appeared to be translucent—up to a point, that is. One could see into it, but he could not see through it. And there were no signs of seams. It was fitted neatly and tightly around the water pipes and the ceiling lights.

Taine stood on a chair and rapped his knuckles against it sharply. It gave out a bell-like sound, almost exactly as if he'd rapped a fingernail against a thinly-blown goblet.

He got down off the chair and stood there, shaking his head. The whole thing was beyond him. He had spent part of the evening repairing Banker Steven's lawn mower and there'd been no ceiling then.

He rummaged in a box and found a drill. He dug out one of the smaller bits and fitted it in the drill. He plugged in the cord and climbed on the chair again and tried the bit against the ceiling. The whirling steel slid wildly back and forth. It didn't make a scratch. He switched off the drill and looked closely at the ceiling. There was not a mark upon it. He tried again, pressing against

the drill with all his strength. The bit went *ping* and the broken end flew across the basement and hit the wall.

Taine stepped down off the chair. He found another bit and fitted it in the drill and went slowly up the stairs, trying to think. But he was too confused to think. That ceiling should not be up there, but there it was. And unless he were stark, staring crazy and forgetful as well, he had not put it there.

In the living room, he folded back one corner of the worn and faded carpeting and plugged in the drill. He knelt and started drilling in the floor. The bit went smoothly through the old oak flooring, then stopped. He put on more pressure and the drill spun without getting any bite.

And there wasn't supposed to be anything underneath that wood! Nothing to stop a drill. Once through the flooring, it should have dropped into the space between the joists.

Taine disengaged the drill and laid it to one side.

He went into the kitchen and the coffee now was ready. But before he poured it, he pawed through a cabinet drawer and found a pencil flashlight. Back in the living room he shined the light into the hole that the drill had made.

There was something shiny at the bottom of the hole.

He went back to the kitchen and found some day-old doughnuts and poured a cup of coffee. He sat at the kitchen table, eating doughnuts and wondering what to do.

There didn't appear, for the moment at least, much that he could do. He could putter around all day trying to figure out what had happened to his basement and probably not be any wiser than he was right now.

His money-making Yankee soul rebelled against such a horrid waste of time.

There was, he told himself, that maple four-poster that he should be getting to before some unprincipled city antique dealer should run afoul of it. A piece like that, he figured, if a man had any luck at all, should sell at a right good price. He might turn a handsome profit on it if he only worked it right.

Maybe, he thought, he could turn a trade on it. There was the table model TV set that he had traded a pair of ice skates for last winter. Those folks out Woodman way might conceivably be happy to trade the bed for a reconditioned TV set, almost like brand new. After all, they probably weren't using the bed and, he hoped fervently, had no idea of the value of it.

He ate the doughnuts hurriedly and gulped down an extra cup of coffee. He fixed a plate of scraps for Towser and set it outside the door. Then he went down into the basement and got the table TV set and put it in the pickup truck. As an afterthought, he added a reconditioned shotgun which would be perfectly all right if a man were careful not to use these far-reaching, powerful shells, and a few other odds and

ends that might come in handy on a trade.

II

He got back late, for it had been a busy and quite satisfactory day. Not only did he have the four-poster loaded on the truck, but he had as well a rocking chair, a fire screen, a bundle of ancient magazines, an old-fashioned barrel churn, a walnut highboy and a Governor Winthrop on which some half-baked, slap-happy decorator had applied a coat of apple-green paint. The television set, the shotgun and five dollars had gone into the trade. And what was better yet—he'd managed it so well that the Woodman family probably was dying of laughter at this very moment about how they'd taken him.

He felt a little ashamed of it—they'd been such friendly people. They had treated him so kindly and had him stay for dinner and had sat and talked with him and shown him about the farm and even asked him to stop by if he went through that way again.

He'd wasted the entire day, he thought, and he rather hated that, but maybe it had been worth it to build up his reputation out that way as the sort of character who had softening of the head and didn't know the value of a dollar. That way, maybe some other day, he could do some more business in the neighborhood.

He heard the television set as he opened the back door, sounding loud and clear, and he went clattering

down the basement stairs in something close to panic. For now that he'd traded off the table model, Abbie's set was the only one downstairs and Abbie's set was broken.

It was Abbie's set, all right. It stood just where he and Beasley had put it down that morning and there was nothing wrong with it—nothing wrong at all. It was even televising color.

Televising color!

He stopped at the bottom of the stairs and leaned against the railing for support.

The set kept right on televising color.

Taine stalked the set and walked around behind it.

The back of the cabinet was off, leaned against a bench that stood behind the set, and he could see the innards of it glowing cheerily.

He squatted on the basement floor and squinted at the lighted innards and they seemed a good deal different from the way that they should be. He'd repaired the set many times before and he thought he had a good idea of what the working parts would look like. And now they all seemed different, although just how he couldn't tell.

A heavy step sounded on the stairs and a hearty voice came booming down to him.

"Well, Hiram, I see you got it fixed."

Taine jackknifed upright and stood there slightly frozen and completely speechless.

Henry Horton stood foursquarely

and happily on the stairs, looking very pleased.

"I told Abbie that you wouldn't have it done, but she said for me to come over anyway—Hey, Hiram, it's in color! How did you do it, man?"

Taine grinned sickly. "I just got fiddling around," he said.

Henry came down the rest of the stairs with a stately step and stood before the set, with his hands behind his back, staring at it fixedly in his best executive manner.

He slowly shook his head. "I never would have thought," he said, "that it was possible."

"Abbie mentioned that you wanted color."

"Well, sure. Of course, I did. But not on this old set. I never would have expected to get color on this set. How did you do it, Hiram?"

Taine told the solemn truth. "I can't rightly say," he said.

Henry found a nail keg standing in front of one of the benches and rolled it out in front of the old-fashioned set. He sat down warily and relaxed into solid comfort.

"That's the way it goes," he said. "There are men like you, but not very many of them. Just Yankee tinkers. You keep messing around with things, trying one thing here and another there and before you know it you come up with something."

He sat on the nail keg, staring at the set.

"It's sure a pretty thing," he said. "It's better than the color they have in Minneapolis. I dropped in at a

couple of the places the last time I was there and looked at the color sets. And I tell you honest, Hiram, there wasn't one of them that was as good as this."

Taine wiped his brow with his shirt sleeve. Somehow or other, the basement seemed to be getting warm. He was fine sweat all over.

Henry found a big cigar in one of his pockets and held it out to Taine.

"No, thanks. I never smoke."

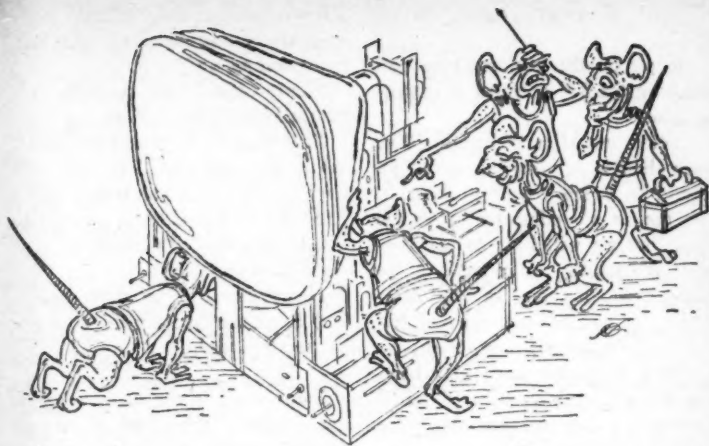
"Perhaps you're wise," said Henry. "It's a nasty habit."

He stuck the cigar into his mouth and rolled it east to west.

"Each man to his own," he proclaimed, expansively. "When it comes to a thing like this, you're the man to do it. You seem to think in mechanical contraptions and electronic circuits. Me, I don't know a thing about it. Even in the computer game, I still don't know a thing about it; I hire men who do. I can't even saw a board or drive a nail. But I can organize. You remember, Hiram, how everybody snickered when I started up the plant?"

"Well, I guess some of them did, at that."

"You're darn tooting they did. They went around for weeks with their hands up to their faces to hide smart-Aleck grins. They said, what does Henry think he's doing, starting up a computer factory out here in the sticks; he doesn't think he can compete with those big companies in the east, does he? And they didn't stop their grinning until I sold a



couple of dozen units and had orders for a year or two ahead."

He fished a lighter from his pocket and lit the cigar carefully, never taking his eyes off the television set.

"You got something there," he said, judiciously, "that may be worth a mint of money. Some simple adaptation that will fit on any set. If you can get color on this old wreck, you can get color on any set that's made."

He chuckled moistly around the mouthful of cigar. "If RCA knew what was happening here this minute, they'd go out and cut their throats."

"But I don't know what I did," protested Taine.

"Well, that's all right," said Henry, happily. "I'll take this set up to the plant tomorrow and turn loose some of the boys on it. They'll find

out what you have here before they're through with it."

He took the cigar out of his mouth and studied it intently, then popped it back in again.

"As I was saying, Hiram, that's the difference in us. You can do the stuff, but you miss the possibilities. I can't do a thing, but I can organize it once the thing is done. Before we get through with this, you'll be wading in twenty dollar bills clear up to your knees."

"But I don't have—"

"Don't worry. Just leave it all to me. I've got the plant and whatever money we may need. We'll figure out a split."

"That's fine of you," said Taine mechanically.

"Not at all," Henry insisted, grandly. "It's just my aggressive, grasping sense of profit. I should be

ashamed of myself, cutting in on this."

He sat on the keg, smoking and watching the TV perform in exquisite color.

"You know, Hiram," he said, "I've often thought of this, but never got around to doing anything about it. I've got an old computer up at the plant that we will have to junk because it's taking up room that we really need. It's one of our early models, a sort of experimental job that went completely sour. It sure is a screwy thing. No one's ever been able to make much out of it. We tried some approaches that probably were wrong—or maybe they were right, but we didn't know enough to make them quite come off. It's been standing in a corner all these years and I should have junked it long ago. But I sort of hate to do it. I wonder if you might not like it—just to tinker with."

"Well, I don't know," said Taine.

Henry assumed an expansive air. "No obligation, mind you. You may not be able to do a thing with it—I'd frankly be surprised if you could, but there's no harm in trying. Maybe you'll decide to tear it down for the salvage you can get. There are several thousand dollars worth of equipment in it. Probably you could use most of it one way and another."

"It might be interesting," conceded Taine, but not too enthusiastically.

"Good," said Henry, with an enthusiasm that made up for Taine's lack of it. "I'll have the boys cart it over tomorrow. It is a heavy thing.

I'll send along plenty of help to get it unloaded and down into the basement and set up."

Henry stood up carefully and brushed cigar ashes off his lap.

"I'll have the boys pick up the TV set at the same time," he said. "I'll have to tell Abbie you haven't got it fixed yet. If I ever let it get into the house, the way it's working now, she'd hold on to it."

Henry climbed the stairs heavily and Taine saw him out the door into the summer night.

Taine stood in the shadow, watching Henry's shadowed figure go across the Widow Taylor's yard to the next street behind his house. He took a deep breath of the fresh night air and shook his head to try to clear his buzzing brain, but the buzzing went right on.

Too much had happened, he told himself. Too much for any single day—first the ceiling and now the TV set. Once he had a good night's sleep he might be in some sort of shape to try to wrestle with it.

Towser came around the corner of the house and limped slowly up the steps to stand beside his master. He was mud up to his ears.

"You had a day of it, I see," said Taine. "And, just like I told you, you didn't get the woodchuck."

"Woof," said Towser, sadly.

"You're just like a lot of the rest of us," Taine told him, severely. "Like me and Henry Horton and all the rest of us. You are chasing something and you think you know what

you are chasing, but you really don't. And what is even worse; you have no faint idea of why you're chasing it."

Towser thumped a tired tail upon the stoop.

Taine opened the door and stood to one side to let Towser in, then went in himself.

He went through the refrigerator and found part of a roast, a slice or two of luncheon meat, a dried out slab of cheese and half a bowl of cooked spaghetti. He made a pot of coffee and shared the food with Towser.

Then Taine went back downstairs and shut off the television set. He found a trouble lamp and plugged it in and poked the light into the innards of the set.

He squatted on the floor, holding the lamp, trying to puzzle out what had been done to the set. It was different, of course, but it was a little hard to figure out in just what ways it was different. Someone had tinkered with the tubes and had them twisted out of shape and there were little white cubes of metal tucked here and there in what seemed to be an entirely haphazard and illogical manner—although, Taine admitted to himself, there probably was no haphazardness. And the circuit, he saw, had been rewired and a good deal of wiring had been added.

But the most puzzling thing about it was that the whole thing seemed to be just jury-rigged—as if someone had done no more than a hurried, patch-up job to get the set back in

working order on an emergency and temporary basis.

Someone, he thought!

And who had that someone been?

He hunched around and peered into the dark corners of the basement and he felt innumerable and many-legged imaginary insects running on his body.

Someone had taken the back off the cabinet and leaned it against the bench and had left the screws which held the back laid neatly in a row upon the floor. Then they had jury-rigged the set and jury-rigged it far better than it had ever been before.

If this was a jury-job, he wondered, just what kind of job would it have been if they had had the time to do it up in style?

They hadn't had the time, of course. Maybe they had been scared off when he had come home—scared off even before they could get the back on the set again.

He stood up and moved stiffly away.

First the ceiling in the morning—and now, in the evening, Abbie's television set.

And the ceiling, come to think of it, was not a ceiling only. Another liner, if that was the proper term for it, of the same material as the ceiling, had been laid beneath the floor, forming a sort of boxed-in area between the joists. He had struck that liner when he had tried to drill into the floor.

And what, he asked himself, if all the house were like that, too?

There was just one answer to it

all: *There was something in the house with him!*

Towser had heard that *something* or smelled it or in some other manner sensed it and had dug frantically at the floor in an attempt to dig it out, as if it were a woodchuck.

Except that this, whatever it might be, certainly was no woodchuck.

He put away the trouble light and went upstairs.

Towser was curled up on a rug in the living room beside the easy-chair and beat his tail in polite decorum in greeting to his master.

Taine stood and stared down at the dog. Towser looked back at him with satisfied and sleepy eyes, then heaved a doggish sigh and settled down to sleep.

Whatever Towser might have heard or smelled or sensed this morning, it was quite evident that as of this moment he was aware of it no longer.

Then Taine remembered something else.

He had filled the kettle to make water for the coffee and had set it on the stove. He had turned on the burner and it had worked the first time.

He hadn't had to kick the stove to get the burner going.

III

He woke in the morning and someone was holding down his feet and he sat up quickly to see what was going on.

But there was nothing to be alarm-

ed about; it was only Towser who had crawled into bed with him and now lay sprawled across his feet.

Towser whined softly and his back legs twitched as he chased dream-rabbits.

Taine eased his feet from beneath the dog and sat up, reaching for his clothes. It was early, but he remembered suddenly that he had left all of the furniture he had picked up the day before out there in the truck and should be getting it downstairs where he could start reconditioning it.

Towser went on sleeping.

Taine stumbled to the kitchen and looked out of the window and there, squatted on the back stoop, was Beasley, the Horton man-of-all-work.

Taine went to the back door to see what was going on.

"I quit them, Hiram," Beasley told him. "She kept on pecking at me every minute of the day and I couldn't do a thing to please her, so I up and quit."

"Well, come on in," said Taine. "I suppose you'd like a bite to eat and a cup of coffee."

"I was kind of wondering if I could stay here, Hiram. Just for my keep until I can find something else."

"Let's have breakfast first," said Taine, "then we can talk about it."

He didn't like it, he told himself. He didn't like it at all. In another hour or so Abbie would show up and start stirring up a ruckus about how he'd lured Beasley off. Because, no matter how dumb Beasley might be, he did a lot of work and took a

lot of nagging and there wasn't anyone else in town who would work for Abbie Horton.

"Your ma used to give me cookies all the time," said Beasley. "Your ma was a real good woman, Hiram."

"Yes, she was," said Taine.

"My ma used to say that you folks were quality, not like the rest in town, no matter what kind of airs they were always putting on. She said your family was among the first settlers. Is that really true, Hiram?"

"Well, not exactly first settlers, I guess, but this house has stood here for almost a hundred years. My father used to say there never was a night during all those years that there wasn't at least one Taine beneath its roof. Things like that, it seems, meant a lot to father."

"It must be nice," said Beasley, wistfully, "to have a feeling like that. You must be proud of this house, Hiram."

"Not really proud; more like belonging. I can't imagine living in any other house."

Taine turned on the burner and filled the kettle. Carrying the kettle back, he kicked the stove. But there wasn't any need to kick it; the burner was already beginning to take on a rosy glow.

Twice in a row, Taine thought. This thing is getting better!

"Gee, Hiram," said Beasley, "this is a dandy radio."

"It's no good," said Taine. "It's broke. Haven't had the time to fix it."

"I don't think so, Hiram. I just

turned it on. It's beginning to warm up."

"It's beginning to—Hey, let me see!" yelled Taine.

Beasley told the truth. A faint hum was coming from the tubes.

A voice came in, gaining in volume as the set warmed up.

It was speaking gibberish.

"What kind of talk is that?" asked Beasley.

"I don't know," said Taine, close to panic now.

First the television set, then the stove and now the radio!

He spun the tuning knob and the pointer crawled slowly across the dial face instead of spinning across as he remembered it, and station after station sputtered and went past.

He tuned in the next station that came up and it was strange lingo, too—and he knew by then exactly what he had.

Instead of a \$39.50 job, he had here on the kitchen table an all-band receiver like they advertised in the fancy magazines.

He straightened up and said to Beasley: "See if you can get someone speaking English. I'll get on with the eggs."

He turned on the second burner and got out the frying pan. He put it on the stove and found eggs and bacon in the refrigerator.

Beasley got a station that had band music playing.

"How is that?" he asked.

"That is fine," said Taine.

Towser came out from the bed-

room, stretching and yawning. He went to the door and showed he wanted out.

Taine let him out.

"If I were you," he told the dog, "I'd lay off that woodchuck. You'll have all the woods dug up."

"He ain't digging after any woodchuck, Hiram."

"Well, a rabbit, then."

"Not a rabbit, either. I snuck off yesterday when I was supposed to be beating rugs. That's what Abbie got so sore about."

Taine grunted, breaking eggs into the skillet.

"I snuck away and went over to where Towser was. I talked with him and he told me it wasn't a woodchuck or a rabbit. He said it was something else. I pitched in and helped him dig. Looks to me like he found an old tank of some sort buried out there in the woods."

"Towser wouldn't dig up any tank," protested Taine. "He wouldn't care about anything except a rabbit or a woodchuck."

"He was working hard," insisted Beasley. "He seemed to be excited."

"Maybe the woodchuck just dug his hole under this old tank or whatever it might be."

"Maybe so," Beasley agreed. He fiddled with the radio some more. He got a disk jockey who was pretty terrible.

Taine shoveled eggs and bacon onto plates and brought them to the table. He poured big cups of coffee and began buttering the toast.

"Dive in," he said to Beasley.

"This is good of you, Hiram, to take me in like this. I won't stay no longer than it takes to find a job."

"Well, I didn't exactly say—"

"There are times," said Beasley, "when I get to thinking I haven't got a friend and then I remember your ma, how nice she was to me and all—"

"Oh, all right," said Taine.

He knew when he was licked.

He brought the toast and a jar of jam to the table and sat down, beginning to eat.

"Maybe you got something I could help you with," suggested Beasley, using the back of his hand to wipe egg off his chin.

"I have a load of furniture out in the driveway. I could use a man to help me get it down into the basement."

"I'll be glad to do that," said Beasley. "I am good and strong. I don't mind work at all. I just don't like people jawing at me."

They finished breakfast and then carried the furniture down into the basement. They had some trouble with the Governor Winthrop, for it was an unwieldy thing to handle.

When they finally horsed it down, Taine stood off and looked at it. The man, he told himself, who slapped paint onto that beautiful cherry wood had a lot to answer for.

He said to Beasley: "We have to get the paint off that thing there. And we must do it carefully. Use paint remover and a rag wrapped around a spatula and just sort of

roll it off. Would you like to try it?"

"Sure, I would. Say, Hiram, what will we have for lunch?"

"I don't know," said Taine. "We'll throw something together. Don't tell me you are hungry."

"Well, it was sort of hard work, getting all that stuff down here."

"There are cookies in the jar on the kitchen shelf," said Taine. "Go and help yourself."

When Beasley went upstairs, Taine walked slowly around the basement. The ceiling, he saw, was still intact. Nothing else seemed to be disturbed.

Maybe that television set and the stove and radio, he thought, was just their way of paying rent to me. And if that were the case, he told himself, whoever they might be, he'd be more than willing to let them stay right on.

He looked around some more and could find nothing wrong.

He went upstairs and called to Beasley in the kitchen.

"Come on out to the garage, where I keep the paint. We'll hunt up some remover and show you how to use it."

Beasley, a supply of cookies clutched in his hand, trotted willingly behind him.

As they rounded the corner of the house they could hear Towser's muffled barking. Listening to him, it seemed to Taine that he was getting hoarse.

Three days, he thought—or was it four?

"If we don't do something about it," he said, "that fool dog is going to get himself wore out."

He went into the garage and came back with two shovels and a pick.

"Come on," he said to Beasley. "We have to put a stop to this before we have any peace."

IV

Towser had done himself a noble job of excavation. He was almost completely out of sight. Only the end of his considerably bedraggled tail showed out of the hole he had clawed in the forest floor.

Beasley had been right about the tanklike thing. One edge of it showed out of one side of the hole.

Towser backed out of the hole and sat down heavily, his whiskers dripping clay, his tongue hanging out of the side of his mouth.

"He says that it's about time that we showed up," said Beasley.

Taine walked around the hole and knelt down. He reached down a hand to brush the dirt off the projecting edge of Beasley's tank. The clay was stubborn and hard to wipe away, but from the feel of it the tank was heavy metal.

Taine picked up a shovel and rapped it against the tank. The tank gave out a clang.

They got to work, shoveling away a foot or so of topsoil that lay above the object. It was hard work and the thing was bigger than they had thought and it took some time to get it uncovered, even roughly.

"I'm hungry," Beasley complained.

Taine glanced at his watch. It was almost one o'clock.

"Run on back to the house," he said to Beasley. "You'll find something in the refrigerator and there is milk to drink."

"How about you, Hiram? Ain't you ever hungry?"

"You could bring me back a sandwich and see if you can find a trowel."

"What you want a trowel for?"

"I want to scrape the dirt off this thing and see what it is."

He squatted down beside the thing they had unearthed and watched Beasley disappear into the woods.

"Towser," he said, "this is the strangest animal you ever put to ground."

A man, he told himself, might better joke about it—if to do no more than keep his fear away.

Beasley wasn't scared, of course. Beasley didn't have the sense to be scared of a thing like this.

Twelve feet wide by twenty long and oval shaped. About the size, he thought, of a good-size living room. And there never had been a tank of that shape or size in all of Willow Bend.

He fished his jackknife out of his pocket and started to scratch away the dirt at one point on the surface of the thing. He got a square inch free of dirt and it was no metal such as he had ever seen. It looked for all the world like glass.

He kept on scraping at the dirt until he had a clean place as big as an outstretched hand.

It wasn't any metal. He'd almost swear to that. It looked like cloudy

glass—like the milk glass goblets and bowls he was always on the lookout for. There were a lot of people who were plain nuts about it and they'd pay fancy prices for it.

He closed the knife and put it back into his pocket and squatted, looking at the oval shape that Towser had discovered.

And the conviction grew: Whatever it was that had come to live with him undoubtedly had arrived in this same contraption. From space or time, he thought, and was astonished that he thought it, for he'd never thought such a thing before.

He picked up his shovel and began to dig again, digging down this time, following the curving side of this alien thing that lay within the earth.

And as he dug, he wondered. What should he say about this—or should he say anything? Maybe the smartest course would be to cover it again and never breathe a word about it to a living soul.

Beasley would talk about it, naturally. But no one in the village would pay attention to anything that Beasley said. Everyone in Willow Bend knew Beasley was cracked.

Beasley finally came back. He carried three inexpertly-made sandwiches wrapped in an old newspaper and a quart bottle almost full of milk.

"You certainly took your time," said Taine, slightly irritated.

"I got interested," Beasley explained.

"Interested in what?"

"Well, there were three big trucks and they were lugging a lot of heavy

stuff down into the basement. Two or three big cabinets and a lot of other junk. And you know Abbie's television set? Well, they took the set away. I told them that they shouldn't, but they took it anyway."

"I forgot," said Taine. "Henry said he'd send the computer over and I plumb forgot."

Taine ate the sandwiches, sharing them with Towser, who was very grateful in a muddy way.

Finished, Taine rose and picked up his shovel.

"Let's get to work," he said.

"But you got all that stuff down in the basement."

"That can wait," said Taine. "This job we have to finish."

It was getting dusk by the time they finished.

Taine leaned wearily on his shovel.

Twelve feet by twenty across the top and ten feet deep—and all of it, every bit of it, made of the milk-glass stuff that sounded like a bell when you whacked it with a shovel.

They'd have to be small, he

thought, if there were many of them, to live in a space that size, especially if they had to stay there very long. And that fitted in, of course, for if they weren't small they couldn't now be living in the space between the basement joists.

If they were really living there, thought Taine. If it wasn't all just a lot of supposition.

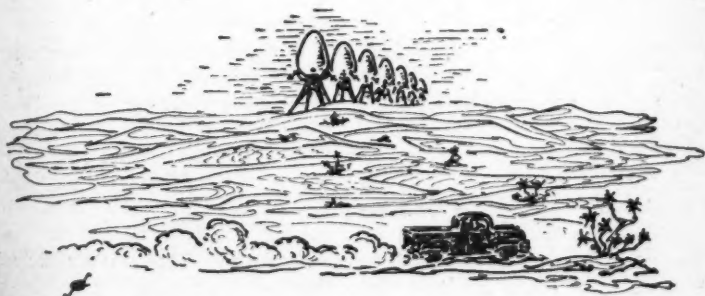
Maybe, he thought, even if they had been living in the house, they might be there no longer—for Towser had smelled or heard or somehow sensed them in the morning, but by that very night he'd paid them no attention.

Taine slung his shovel across his shoulder and hoisted the pick.

"Come on," he said, "let's go. We've put in a long, hard day."

They tramped out through the brush and reached the road.

Fireflies were flickering off and on in the woody darkness and the street lamps were swaying in the summer breeze. The stars were hard and bright.



Maybe they still were in the house, thought Taine. Maybe when they found out that Towser had objected to them, they had fixed it so he'd be aware of them no longer.

They probably were highly adaptive. It stood to good reason they would have to be. It hadn't taken them too long, he told himself grimly, to adapt to a human house.

He and Beasley went up the gravel driveway in the dark to put the tools away in the garage and there was something funny going on, for there was no garage.

There was no garage and there was no front on the house and the driveway was cut off abruptly and there was nothing but the curving wall of what apparently had been the end of the garage.

They came up to the curving wall and stopped, squinting unbelieving in the summer dark.

There was no garage, no porch, no front of the house at all. It was as if someone had taken the opposite corners of the front of the house and bent them together until they touched, folding the entire front of the building inside the curvature of the bent-together corners.

Hiram now had a curved-front house. Although it was, actually, not as simple as all that, for the curvature was not in proportion to what actually would have happened in case of such a feat. The curve was long and graceful and somehow not quite apparent. It was as if the front of the house had been eliminated and an illusion of the rest of the house had

been summoned to mask the disappearance.

Taine dropped the shovel and the pick and they clattered on the driveway gravel. He put his hand up to his face and wiped it across his eyes, as if to clear his eyes of something that could not possibly be there.

And when he took the hand away it had not changed a bit.

There was no front to the house.

Then he was running around the house, hardly knowing he was running, and there was a fear inside of him at what had happened to the house.

But the back of the house was all right. It was exactly as it had always been.

He clattered up the stoop with Beasley and Towser running close behind him. He pushed open the door and burst into the entry and scrambled up the stairs into the kitchen and went across the kitchen in three strides to see what had happened to the front of the house.

At the door between the kitchen and the living room he stopped and his hands went out to grasp the door jamb as he stared, in disbelief at the windows of the living room.

It was night outside. There could be no doubt of that. He had seen the fireflies flickering in the brush and weeds and the street lamps had been lit and the stars were out.

But a flood of sunlight was pouring through the windows of the living room and out beyond the windows lay a land that was not Willow Bend.

"Beasley," he gasped, "look out there in front?"

Beasley looked.

"What place is that?" he asked.

"That's what I'd like to know."

Towser had found his dish and was pushing it around the kitchen floor with his nose, by way of telling Taine that it was time to eat.

Taine went across the living room and opened the front door. The garage, he saw, was there. The pickup stood with its nose against the open garage door and the car was safe inside.

There was nothing wrong with the front of the house at all.

But if the front of the house was all right, that was all that was.

For the driveway chopped off just a few feet beyond the tail end of the pickup and there was no yard or woods or road. There was just a desert—a flat, far-reaching desert, level as a floor, with occasional boulder piles and haphazard clumps of vegetation and all of the ground covered with sand and pebbles. A big blinding sun hung just above a horizon that seemed much too far away and a funny thing about it was that the sun was in the north, where no proper sun should be. It had a peculiar whiteness, too.

Beasley stepped out on the porch and Taine saw that he was shivering like a frightened dog.

"Maybe," Taine told him, kindly, "you'd better go back in and start making us some supper."

"But, Hiram—"

"It's all right," said Taine. "It's bound to be all right."

"If you say so, Hiram."

He went in and the screen door banged behind him and in a minute Taine heard him in the kitchen.

He didn't blame Beasley for shivering, he admitted to himself. It was a sort of shock to step out of your front door into an unknown land. A man might eventually get used to it, of course, but it would take some doing.

He stepped down off the porch and walked around the truck and around the garage corner and when he rounded the corner he was half prepared to walk back into familiar Willow Bend—for when he had gone in the back door the village had been there.

There was no Willow Bend. There was more of the desert, a great deal more of it.

He walked around the house and there was no back to the house. The back of the house now was just the same as the front had been before—the same smooth curve pulling the sides of the house together.

He walked on around the house to the front again and there was desert all the way. And the front was still all right. It hadn't changed at all. The truck was there on the chopped-off driveway and the garage was open and the car inside.

Taine walked out a ways into the desert and hunkered down and scooped up a handful of the pebbles and the pebbles were just pebbles.

He squatted there and let the pebbles trickle through his fingers.

In Willow Bend there was a back door and there wasn't any front. Here, wherever here might be, there was a front door, but there wasn't any back.

He stood up and tossed the rest of the pebbles away and wiped his dusty hands upon his britches.

Out of the corner of his eye he caught a sense of movement on the porch and there they were.

A line of tiny animals, if animals they were, came marching down the steps, one behind the other. They were four inches high or so and they went on all four feet, although it was plain to see that their front feet were really hands, not feet. They had ratlike faces that were vaguely human, with noses long and pointed. They looked like they might have scales instead of hide, for their bodies glistened with a rippling motion as they walked. And all of them had tails that looked very much like the coiled-wire tails one finds on certain toys and the tails stuck straight up above them, quivering as they walked.

They came down the steps in single file, in perfect military order, with half a foot or so of spacing between each one of them.

They came down the steps and walked out into the desert in a straight, undeviating line as if they knew exactly where they might be bound. There was something deadly purposeful about them and yet they didn't hurry.

Taine counted sixteen of them and he watched them go out into the

desert until they were almost lost to sight.

There go the ones, he thought, who came to live with me. They are the ones who fixed up the ceiling and who repaired Abbie's television set and jiggered up the stove and radio. And more than likely, too, they were the ones who had come to Earth in the strange milk-glass contraption out there in the woods.

And if they had come to Earth in that deal out in the woods, then what sort of place was this?

He climbed the porch and opened the screen door and saw the neat, six-inch circle his departing guests had achieved in the screen to get out of the house. He made a mental note that some day, when he had the time, he would have to fix it.

He went in and slammed the door behind him.

"Beasly," he shouted.

There was no answer.

Towser crawled from beneath the love seat and apologized.

"It's all right, pal," said Taine. "That outfit scared me, too."

He went into the kitchen. The dim ceiling light shone on the overturned coffee pot, the broken cup in the center of the floor, the upset bowl of eggs. One broken egg was a white and yellow gob on the linoleum.

He stepped down on the landing and saw that the screen door in the back was wrecked beyond repair. Its rusty mesh was broken—exploded might have been a better word—and a part of the frame was smashed.

Taine looked at it in wondering admiration.

"The poor fool," he said. "He went straight through it without opening it at all."

He snapped on the light and went down the basement stairs. Halfway down he stopped in utter wonderment.

To his left was a wall—a wall of the same sort of material as had been used to put in the ceiling.

He stooped and saw that the wall ran clear across the basement, floor to ceiling, shutting off the workshop area.

And inside the workshop, what?

For one thing, he remembered, the computer that Henry had sent over just this morning. Three trucks, Beasley had said—three truckloads of equipment delivered straight into their paws!

Taine sat down weakly on the steps.

They must have thought, he told himself, that he was co-operating! Maybe they had figured that he knew what they were about and so went along with them. Or perhaps they thought he was paying them for fixing up the TV set and the stove and radio.

But to tackle first things first, why had they repaired the TV set and the stove and radio? As a sort of rental payment? As a friendly gesture? Or as a sort of practice run to find out what they could about this world's technology? To find, perhaps, how their technology could be adapted to

the materials and conditions on this planet they had found?

Taine raised a hand and rapped with his knuckles on the wall beside the stairs and the smooth white surface gave out a pinging sound.

He laid his ear against the wall and listened closely and it seemed to him he could hear a low-key humming, but if so it was so faint he could not be absolutely sure.

Banker Stevens' lawn mower was in there, behind the wall, and a lot of other stuff waiting for repair. They'll take the hide right off him, he thought, especially Banker Stevens. Stevens was a tight man.

Beasley must have been half-crazed with fear, he thought. When he had seen those things coming up out of the basement, he'd gone clean off his rocker. He'd gone straight through the door without even bothering to try to open it and now he was down in the village yapping to anyone who'd stop to listen to him.

No one ordinarily would pay Beasley much attention, but if he yapped long enough and wild enough, they'd probably do some checking. They'd come storming up here and they'd give the place a going over and they'd stand goggle-eyed at what they found in front and pretty soon some of them would have worked their way around to sort of running things.

And it was none of their business, Taine stubbornly told himself, his ever-present business sense rising to the fore. There was a lot of real

estate lying around out there in his front yard and the only way anyone could get to it was by going through his house. That being the case, it stood to reason that all that land out there was his. Maybe it wasn't any good at all. There might be nothing there. But before he had other people overrunning it, he'd better check and see.

He went up the stairs and out into the garage.

The sun was still just above the northern horizon and there was nothing moving.

He found a hammer and some nails and a few short lengths of plank in the garage and took them in the house.

Towser, he saw, had taken advantage of the situation and was sleeping in the gold-upholstered chair. Taine didn't bother him.

Taine locked the back door and nailed some planks across it. He locked the kitchen and the bedroom windows and nailed planks across them, too.

That would hold the villagers for a while, he told himself, when they came tearing up here to see what was going on.

He got his deer rifle, a box of cartridges, a pair of binoculars and an old canteen out of a closet. He filled the canteen at the kitchen tap and stuffed a sack with food for him and Towser to eat along the way, for there was no time to wait and eat.

Then he went into the living room and dumped Towser out of the gold-upholstered chair.

"Come on, Tows," he said. "We'll go and look things over."

He checked the gasoline in the pickup and the tank was almost full.

He and the dog got in and he put the rifle within easy reach. Then he backed the truck and swung it around and headed out, north, across the desert.

It was easy traveling. The desert was as level as a floor. At times it got a little rough, but no worse than a lot of the back roads he traveled hunting down antiques.

The scenery didn't change. Here and there were low hills, but the desert kept on mostly level, unraveling itself into that far-off horizon. Taine kept on driving north, straight into the sun. He hit some sandy stretches, but the sand was firm and hard and he had no trouble.

Half an hour out he caught up with the band of things—all sixteen of them—that had left the house. They were still traveling in line at their steady pace.

Slowing down the truck, Taine traveled parallel with them for a time, but there was no profit in it; they kept on traveling their course, neither looking right or left.

Speeding up, Taine left them behind.

The sun stayed in the north, unmoving, and that certainly was queer. Perhaps, Taine told himself, this world spun on its axis far more slowly than the Earth and the day was longer. From the way the sun

appeared to be standing still, perhaps a good deal longer.

Hunched above the wheel, staring out into the endless stretch of desert, the strangeness of it struck him for the first time with its full impact.

This was another world—there could be no doubt of that—another planet circling another star, and where it was in actual space no one on Earth could have the least idea. And yet, through some machination of those sixteen things walking straight in line, it also was lying just outside the front door of his house.

Ahead of him a somewhat larger hill loomed out of the flatness of the desert. As he drew nearer to it, he made out a row of shining objects lined upon its crest. After a time he stopped the truck and got out with the binoculars.

Through the glasses, he saw that the shining things were the same sort of milk-glass contraptions as had been in the woods. He counted eight of them, shining in the sun, perched upon some sort of rock-gray cradles. And there were other cradles empty.

He took the binoculars from his eyes and stood there for a moment, considering the advisability of climbing the hill and investigating closely. But he shook his head. There'd be time for that later on. He'd better keep on moving. This was not a real exploring foray, but a quick reconnaissance.

He climbed into the truck and drove on, keeping watch upon the gas gauge. When it came close to

half full he'd have to turn around and go back home again.

Ahead of him he saw a faint whiteness above the dim horizon line and he watched it narrowly. At times it faded away and then came in again, but whatever it might be was so far off he could make nothing of it.

He glanced down at the gas gauge and it was close to the halfway mark. He stopped the pickup and got out with the binoculars.

As he moved around to the front of the machine he was puzzled at how slow and tired his legs were and then remembered—he should have been in bed many hours ago. He looked at his watch and it was two o'clock and that meant, back on Earth, two o'clock in the morning. He had been awake for more than twenty hours and much of that time he had been engaged in the back-breaking work of digging out the strange thing in the woods.

He put up the binoculars and the elusive white line that he had been seeing turned out to be a range of mountains. The great, blue, craggy mass towered up above the desert with the gleam of snow on its peaks and ridges. They were a long way off, for even the powerful glasses brought them in as little more than a misty blueness.

He swept the glasses slowly back and forth and the mountains extended for a long distance above the horizon line.

He brought the glasses down off the mountains and examined the desert that stretched ahead of him.

There was more of the same that he had been seeing—the same floorlike levelness, the same occasional mounds, the self-same scraggy vegetation.

And a house!

His hands trembled and he lowered the glasses, then put them up to his face again and had another look. It was a house, all right. A funny-looking house standing at the foot of one of the hillocks, still shadowed by the hillock so that one could not pick it out with the naked eye.

It seemed to be a small house. Its roof was like a blunted cone and it lay tight against the ground, as if it hugged or crouched against the ground. There was an oval opening that probably was a door, but there was no sign of windows.

He took the binoculars down again and stared at the hillock. Four or five miles away, he thought. The gas would stretch that far and even if it didn't, he could walk the last few miles into Willow Bend.

It was queer, he thought, that a house should be all alone out here. In all the miles he'd traveled in the desert he'd seen no sign of life beyond the sixteen little ratlike things that marched in single file, no sign of artificial structure other than the eight milk-glass contraptions resting in their cradles.

He climbed into the pickup and put it into gear. Ten minutes later he drew up in front of the house, which still lay within the shadow of the hillock.

He got out of the pickup and haul-

ed his rifle after him. Towser leaped to the ground and stood with his hackles up, a deep growl in his throat.

"What's the matter, boy?" asked Taine.

Towser growled again.

The house stood silent. It seemed to be deserted.

The walls were built, Taine saw, of rude, rough masonry crudely set together, with a crumbling, mudlike substance used in lieu of mortar. The roof originally had been of sod and that was queer, indeed, for there was nothing that came close to sod upon this expanse of desert. But now, although one could see the lines where the sod strips had been fit together, it was nothing more than earth baked hard by the desert sun.

The house itself was featureless, entirely devoid of any ornament, with no attempt at all to soften the harsh utility of it as a simple shelter. It was the sort of thing that a shepherd people might have put together. It had the look of age about it; the stone had flaked and crumbled in the weather.

Rifle slung beneath his arm, Taine paced toward it. He reached the door and glanced inside and there was darkness and no movement.

He glanced back for Towser and saw that the dog had crawled beneath the truck and was peering out and growling.

"You stick around," said Taine. "Don't go running off."

With the rifle thrust before him,

Taine stepped through the door into the darkness. He stood for a long moment to allow his eyes to become accustomed to the gloom.

Finally he could make out the room in which he stood. It was plain and rough, with a rude stone bench along one wall and queer unfunctional niches hollowed in another. One rickety piece of wooden furniture stood in a corner, but Taine could not make out what its use might be.

An old and deserted place, he thought, abandoned long ago. Perhaps a shepherd people might have lived here in some long-gone age, when the desert had been a rich and grassy plain.

There was a door into another room and as he stepped through it he heard the faint, far-off booming sound and something else as well—the sound of pouring rain! From the open door that led out through the back he caught a whiff of salty breeze and he stood there frozen in the center of that second room.

Another one!

Another house that led to another world!

He walked slowly forward, drawn toward the outer door, and he stepped out into a cloudy, darkling day with the rain streaming down from wildly racing clouds. Half a mile away, across a field of jumbled, broken, iron-gray boulders, lay a pounding sea that raged upon the coast, throwing great spumes of angry spray high into the air.

He walked out from the door and looked up at the sky and the rain

drops pounded at his face with a stinging fury. There was a chill and a dampness in the air and the place was eldritch—a world jerked straight from some ancient Gothic tale of goblin and of sprite.

He glanced around and there was nothing he could see, for the rain blotted out the world beyond this stretch of coast, but behind the rain he could sense or seemed to sense a presence that sent shivers down his spine. Gulping in fright, Taine turned around and stumbled back again through the door into the house.

One world away, he thought, was far enough; two worlds away was more than one could take. He trembled at the sense of utter loneliness that tumbled in his skull and suddenly this long-forsaken house became unbearable and he dashed out of it.

Outside the sun was bright and there was welcome warmth. His clothes were damp from rain and little beads of moisture lay on the rifle barrel.

He looked around for Towser and there was no sign of the dog. He was not underneath the pickup; he was nowhere in sight.

Taine called and there was no answer. His voice sounded lone and hollow in the emptiness and silence.

He walked around the house, looking for the dog, and there was no back door to the house. The rough rock walls of the sides of the house pulled in with that funny curvature and there was no back to the house at all.



But Taine was not interested; he had known how it would be. Right now he was looking for his dog and he felt the panic rising in him. Somehow it felt a long way from home.

He spent three hours at it. He went back into the house and Towser was not there. He went into the other world again and searched among the tumbled rocks and Towser was not there. He went back to the desert and walked around the hillock and then he climbed to the crest of it and used the binoculars and saw nothing but the lifeless desert, stretching far in all directions.

Deadbeat with weariness, stumbling, half asleep even as he walked, he went back to the pickup.

He leaned against it and tried to pull his wits together.

Continuing as he was would be a useless effort. He had to get some sleep. He had to go back to Willow Bend and fill the tank and get some extra gasoline so that he could range

farther afield in his search for Towser.

He couldn't leave the dog out here—that was unthinkable. But he had to plan, he had to act intelligently. He would be doing Towser no good by stumbling around in his present shape.

He pulled himself into the truck and headed back for Willow Bend, following the occasional faint impressions that his tires had made in the sandy places, fighting a half-dead drowsiness that tried to seal his eyes shut.

Passing the higher hill on which the milk-glass things had stood, he stopped to walk around a bit so he wouldn't fall asleep behind the wheel. And now, he saw, there were only seven of the things resting in their cradles.

But that meant nothing to him now. All that meant anything was to hold off the fatigue that was closing down upon him, to cling to the wheel

and wear off the miles, to get back to Willow Bend and get some sleep and then come back again to look for Towser.

Slightly more than halfway home he saw the other car and watched it in numb befuddlement, for this truck that he was driving and the car at home in his garage were the only two vehicles this side of his house.

He pulled the pickup to a halt and stumbled out of it.

The car drew up and Henry Horton and Beasley and a man who wore a star leaped quickly out of it.

"Thank God we found you, man!" cried Henry, striding over to him.

"I wasn't lost," protested Taine. "I was coming back."

"He's all beat out," said the man who wore the star.

"This is Sherriff Hanson," Henry said. "We were following your tracks."

"I lost Towser," Taine mumbled. "I had to go and leave him. Just leave me be and go and hunt for Towser. I can make it home."

He reached out and grabbed the edge of the pickup's door to hold himself erect.

"You broke down the door," he said to Henry. "You broke into my house and you took my car—"

"We had to do it, Hiram. We were afraid that something might have happened to you. The way that Beasley told 'it, it stood your hair 'on end."

"You better get him in the car," the sheriff said. "I'll drive the pickup back."

"But I have to hunt for Towser!"

"You can't do anything until you've had some rest."

Henry grabbed him by the arm and led him to the car and Beasley held the rear door open.

"You got any idea what this place is?" Henry whispered conspiratorily.

"I don't positively know," Taine mumbled. "Might be some other—"

Henry chuckled. "Well, I guess it doesn't really matter. Whatever it may be, it's put us on the map. We're in all the newscasts and the papers are plastering us in headlines and the town is swarming with reporters and cameramen and there are big officials coming. Yes, sir, I tell you, Hiram, this will be the making of us—"

Taine heard no more. He was fast asleep before he hit the seat.

V

He came awake and lay quietly in the bed and he saw the shades were drawn and the room was cool and peaceful.

It was good, he thought, to wake in a room you knew—in a room that one had known for his entire life, in a house that had been the Taine house for almost a hundred years.

Then memory clouted him and he sat bolt upright.

And now he heard it—the insistent murmur from outside the window.

He vaulted from the bed and pulled one shade aside. Peering out, he saw the cordon of troops that held

back the crowd that overflowed his backyard and the backyards back of that.

He let the shade drop back and started hunting for his shoes, for he was fully dressed. Probably Henry and Beasley, he told himself, had dumped him into bed and pulled off his shoes and let it go at that. But he couldn't remember a single thing of it. He must have gone dead to the world the minute Henry had bundled him into the back seat of the car.

He found the shoes on the floor at the end of the bed and sat down upon the bed to pull them on.

And his mind was racing on what he had to do.

He'd have to get some gasoline somehow and fill up the truck and stash an extra can or two into the back and he'd have to take some food and water and perhaps his sleeping bag. For he wasn't coming back until he'd found his dog.

He got on his shoes and tied them, then went out into the living room. There was no one there, but there were voices in the kitchen.

He looked out the window and the desert lay outside, unchanged. The sun, he noticed, had climbed higher in the sky, but out in his front yard it still was forenoon.

He looked at his watch and it was six o'clock and from the way the shadows had been falling when he'd peered out of the bedroom window, he knew that it was 6:00 p.m. He realized with a guilty start that he

must have slept almost around the clock. He had not meant to sleep that long. He hadn't meant to leave Towser out there that long.

He headed for the kitchen and there were three persons there—Abbie and Henry Horton and a man in military garb.

"There you are," cried Abbie, merrily. "We were wondering when you would wake up."

"You have some coffee cooking, Abbie?"

"Yes, a whole pot full of it. And I'll cook up something else for you."

"Just some toast," said Taine. "I haven't got much time. I have to hunt for Towser."

"Hiram," said Henry, "this is Colonel Ryan. National guard. He has his boys outside."

"Yes, I saw them through the window."

"Necessary," said Henry. "Absolutely necessary. The sheriff couldn't handle it. The people came rushing in and they'd have torn the place apart. So I called the governor."

"Taine," the colonel said, "sit down. I want to talk with you."

"Certainly," said Taine, taking a chair. "Sorry to be in such a rush, but I lost my dog out there."

"This business," said the colonel, smugly, "is vastly more important than any dog could be."

"Well, colonel, that just goes to show that you don't know Towser. He's the best dog I ever had and I've had a lot of them. Raised him from a pup and he's been a good friend all these years—"

"All right," the colonel said, "so he is a friend. But still I have to talk with you."

"You just sit and talk," Abbie said to Taine. "I'll fix up some cakes and Henry brought over some of that sausage that we get out on the farm."

The back door opened and Beasley staggered in to the accompaniment of a terrific metallic banging. He was carrying three empty five-gallon gas cans in one hand and two in the other hand and they were bumping and banging together as he moved.

"Say," yelled Taine, "what is going on here?"

"Now, just take it easy," Henry said. "You have no idea the problems that we have. We wanted to get a big gas tank moved through here, but we couldn't do it. We tried to rip out the back of the kitchen to get it through, but we couldn't—"

"You did what!"

"We tried to rip out the back of the kitchen," Henry told him calmly.

"You can't get one of those big storage tanks through an ordinary door. But when we tried, we found that the entire house is boarded up inside with the same kind of material that you used down in the basement. You hit it with an axe and it blunts the steel—"

"But, Henry, this is my house and there isn't anyone who has the right to start tearing it apart."

"Fat chance," the colonel said. "What I would like to know, Taine, what is that stuff that we couldn't break through?"

"Now you take it easy, Hiram," cautioned Henry. "We have a big new world waiting for us out there—"

"It isn't waiting for you or anyone," yelled Taine.

"And we have to explore it and to explore it we need a stockpile of gasoline. So since we can't have a storage tank, we're getting together as many gas cans as possible and then we'll run a hose through here—"

"But, Henry—"

"I wish," said Henry sternly, "that you'd quit interrupting me and let me have my say. You can't even imagine the logistics that we face. We're bottlenecked by the size of a regulation door. We have to get supplies out there and we have to get transport. Cars and trucks won't be so bad. We can disassemble them and lug them through piecemeal, but a plane will be a problem."

"You listen to me, Henry. There isn't anyone going to haul a plane through here. This house has been in my family for almost a hundred years and I own it and I have a right to it and you can't come in high-handed and start hauling stuff through it."

"But," said Henry plaintively, "we need a plane real bad. You can cover so much more ground when you have a plane."

Beasley went banging through the kitchen with his cans and out into the living room.

The colonel sighed. "I had hoped, Mr. Taine, that you would understand how the matter stood. To me it

seems very plain that it's your patriotic duty to co-operate with us in this. The government, of course, could exercise the right of eminent domain and start condemnation action, but it would rather not do that. I'm speaking unofficially, of course, but I think it's safe to say the government would much prefer to arrive at an amicable agreement."

"I doubt," Taine said, bluffing, not knowing anything about it, "that the right of eminent domain would be applicable. As I understand it, it applies to buildings and to roads—"

"This is a road," the colonel told him flatly. "A road right through your house to another world."

"First," Taine declared, "the government would have to show it was in the public interest and that refusal of the owner to relinquish title amounted to an interference in government procedure and—"

"I think," the colonel said, "that the government can prove it is in the public interest."

"I think," Taine said angrily, "I better get a lawyer."

"If you really mean that," Henry offered, ever helpful, "and you want to get a good one—and I presume you do—I would be pleased to recommend a firm that I am sure would represent your interests most ably and be, at the same time, fairly reasonable in cost."

The colonel stood up, seething. "You'll have a lot to answer, Taine. There'll be a lot of things the government will want to know. First of all, they'll want to know just how you

engineered this. Are you ready to tell that?"

"No," said Taine, "I don't believe I am."

And he thought with some alarm: They think that I'm the one who did it and they'll be down on me like a pack of wolves to find just how I did it. He had visions of the FBI and the state department and the Pentagon and, even sitting down, he felt shaky in the knees.

The colonel turned around and marched stiffly from the kitchen. He went out the back and slammed the door behind him.

Henry looked at Taine speculatively.

"Do you really mean it?" he demanded. "Do you intend to stand up to them?"

"I'm getting sore," said Taine. "They can't come in here and take over without even asking me. I don't care what anyone may think, this is my house. I was born here and I've lived here all my life and I like the place and—"

"Sure," said Henry. "I know just how you feel."

"I suppose it's childish of me, but I wouldn't mind so much if they showed a willingness to sit down and talk about what they meant to do once they'd taken over. But there seems no disposition to even ask me what I think about it. And I tell you, Henry, this is different than it seems. This is not a place where we can walk in and take over, no matter what Washington may think. There

is something out there and we better watch our step—"

"I was thinking," Henry interrupted, "as I was sitting here, that your attitude is most commendable and deserving of support. It has occurred to me that it would be most unneighborly of me to go on sitting here and leave you in the fight alone. We could hire ourselves a fine array of legal talent and we could fight the case and in the meantime we could form a land and development company and that way we could make sure that this new world of yours is used the way it should be used.

"It stands to reason, Hiram, that I am the one to stand beside you, shoulder to shoulder, in this business since we're already partners in this TV deal."

"What's that about TV?" shrieked Abbie, slapping a plate of cakes down in front of Taine.

"Now, Abbie," Henry said patiently, "I have explained to you already that your TV set is back of that partition down in the basement and there isn't any telling when we can get it out."

"Yes, I know," said Abbie, bringing a platter of sausages and pouring a cup of coffee.

Beasley came in from the living room and went bumbling out the back.

"After all," said Henry, pressing his advantage, "I would suppose I had some hand in it. I doubt you could have done much without the computer I sent over."

And there it was again, thought

Taine. Even Henry thought he'd been the one who did it."

"But didn't Beasley tell you?"

"Beasley said a lot, but you know how Beasley is."

And that was it, of course. To the villagers it would be no more than another Beasley story—another whopper that Beasley had dreamed up. There was no one who believed a word that Beasley said.

Taine picked up the cup and drank his coffee, gaining time to shape an answer and there wasn't any answer. If he told the truth, it would sound far less believable than any lie he'd tell.

"You can tell me, Hiram. After all, we're partners."

He's playing me for a fool, thought Taine. Henry thinks he can play anyone he wants for a fool and sucker.

"You wouldn't believe me if I told you, Henry."

"Well," Henry said, resignedly, getting to his feet, "I guess that part of it can wait."

Beasley came tramping and banging through the kitchen with another load of cans.

"I'll have to have some gasoline," said Taine, "if I'm going out for Towser."

"I'll take care of that right away," Henry promised smoothly. "I'll send Ernie over with his tank wagon and we can run a hose through here and fill up those cans. And I'll see if I can find someone who'll go along with you."

"That's not necessary. I can go alone."

"If we had a radio transmitter. Then you could keep in touch."

"But we haven't any. And, Henry, I can't wait. Towser's out there somewhere—"

"Sure, I know how much you thought of him. You go out and look for him if you think you have to and I'll get started on this other business. I'll get some lawyers lined up and we'll draw up some sort of corporate papers for our land development—"

"And, Hiram," Abbie said, "will you do something for me, please?"

"Why, certainly," said Taine.

"Would you speak to Beasley. It's senseless the way he's acting. There wasn't any call for him to up and leave us. I might have been a little sharp with him, but he's so simple-minded he's infuriating. He ran off and spent half a day helping Towser at digging out that woodchuck and—"

"I'll speak to him," said Taine.

"Thanks, Hiram. He'll listen to you. You're the only one he'll listen to. And I wish you could have fixed my TV set before all this came about. I'm just lost without it. It leaves a hole in the living room. It matched my other furniture, you know."

"Yes, I know," said Taine.

"Coming, Abbie?" Henry asked, standing at the door.

He lifted a hand in a confidential farewell to Taine. "I'll see you later, Hiram. I'll get it all fixed up."

I just bet you will, thought Taine.

He went back to the table, after they were gone, and sat down heavily in a chair.

The front door slammed and Beasley came panting in, excited.

"Towser's back!" he yelled. "He's coming back and he's driving in the biggest woodchuck you ever clapped your eyes on."

Taine leaped to his feet.

"Woodchuck! That's an alien planet. It hasn't any woodchucks."

"You come and see," yelled Beasley.

He turned and raced back out again, with Taine following close behind.

It certainly looked considerably like a woodchuck—a sort of man-size woodchuck. More like a woodchuck out of a children's book, perhaps, for it was walking on its hind legs and trying to look dignified even while it kept a weather eye on Towser.

Towser was back a hundred feet or so, keeping a wary distance from the massive chuck. He had the pose of a good sheep-herding dog, walking in a crouch, alert to head off any break that the chuck might make.

The chuck came up close to the house and stopped. Then it did an about-face so that it looked back across the desert and it hunkered down.

It swung its massive head to gaze at Beasley and Taine and in the limpid brown eyes Taine saw more than the eyes of an animal.

Taine walked swiftly out and picked up the dog in his arms and hugged him tight against him. Towser twisted his head around and slapped a sloppy tongue across his master's face.

Taine stood with the dog in his arms and looked at the man-size chuck and felt a great relief and an utter thankfulness.

Everything was all right now, he thought. Towser had come back.

He headed for the house and out into the kitchen.

He put Towser down and got a dish and filled it at the tap. He placed it on the floor and Towser lapped at it thirstily, slapping water all over the linoleum.

"Take it easy, there," warned Taine. "You don't want to overdo it."

He hunted in the refrigerator and found some scraps and put them in Towser's dish.

Towser wagged his tail with dog-gish happiness.

"By rights," said Taine, "I ought to take a rope to you, running off like that."

Beasly came ambling in.

"That chuck is a friendly cuss," he announced. "He is waiting for someone."

"That's nice," said Taine, paying no attention.

He glanced at the clock.

"It's seven thirty," he said. "We can catch the news. You want to get it, Beasly?"

"Sure. I know right where to get it. That fellow from New York."

"That's the one," said Taine.

He walked into the living room and looked out the window. The man-size chuck had not moved. He was sitting with his back to the house, looking back the way he'd come.

Waiting for someone, Beasly had

said, and it looked as if he might be, but probably it was all just in Beasly's head.

And if he were waiting for someone, Taine wondered, who might that someone be? *What* might that someone be? Certainly by now the word had spread out there that there was a door into another world. And how many doors, he wondered, had been opened through the ages.

Henry had said that there was a big new world out there waiting for Earthmen to move in. And that wasn't it at all. It was the other way around.

The voice of the news commentator came blasting from the radio in the middle of a sentence:

" . . . Finally got into the act. Radio Moscow said this evening that the Soviet delegate will make representations in the U.N. tomorrow for the internationalization of this other world and the gateway to it.

"From that gateway itself, the home of a man named Hiram Taine, there is no news. Complete security has been clamped down and a cordon of troops form a solid wall around the house, holding back the crowds. Attempts to telephone the residence are blocked by a curt voice which says that no calls are being accepted for that number. And Taine himself has not stepped from the house."

Taine walked back into the kitchen and sat down.

"He's talking about you," Beasly said importantly.

"Rumor circulated this morning that Taine, a quiet village repair man

and dealer in antiques, and until yesterday a relative unknown, had finally returned from a trip which he made out into this new and unknown land. But what he found, if anything, no one yet can say. Nor is there any further information about this other place beyond the fact that it is a desert and, to the moment, lifeless.

"A small flurry of excitement was occasioned late yesterday by the finding of some strange object in the woods across the road from the residence, but this area likewise was swiftly cordoned off and to the moment Colonel Ryan, who commands the troops, will say nothing of what actually was found.

"Mystery man of the entire situation is one Henry Horton, who seems to be the only unofficial person to have entry to the Taine house. Horton, questioned earlier today, had little to say, but managed to suggest an air of great conspiracy. He hinted he and Taine were partners in some mysterious venture and left hanging in midair the half impression that he and Taine had collaborated in opening the new world.

"Horton, it is interesting to note, operates a small computer plant and it is understood on good authority that only recently he delivered a computer to Taine, or at least some sort of machine to which considerable mystery is attached. One story is that this particular machine had been in the process of development for six or seven years.

"Some of the answers to the matter of how all this did happen and

what actually did happen must wait upon the findings of a team of scientists who left Washington this evening after an all-day conference at the White House, which was attended by representatives from the military, the state department, the security division and the special weapons section.

"Throughout the world the impact of what happened yesterday at Willow Bend can only be compared to the sensation of the news, almost twenty years ago, of the dropping of the first atomic bomb. There is some tendency among many observers to believe that the implications of Willow Bend, in fact, may be even more Earth-shaking than were those of Hiroshima.

"Washington insists, as is only natural, that this matter is of internal concern only and that it intends to handle the situation as it best affects the national welfare.

"But abroad there is a rising storm of insistence that this is not a matter of national policy concerning one nation, but that it necessarily must be a matter of worldwide concern.

"There is an unconfirmed report that a U.N. observer will arrive in Willow Bend almost momentarily. France, Britain, Bolivia, Mexico and India have already requested permission of Washington to send observers to the scene and other nations undoubtedly plan to file similar requests.

"The world sits on edge tonight, waiting for the word from Willow Bend and—"

Taine reached out and clicked the radio to silence.

"From the sound of it," said Beasley, "we are going to be overrun by a batch of foreigners."

Yes, thought Taine, there might be a batch of foreigners, but not exactly in the sense that Beasley meant. The use of the word, he told himself, so far as any human was concerned, must be outdated now. No man of Earth ever again could be called a foreigner with alien life next door—literally next door. What were the people of the stone house?

And perhaps not the alien life of one planet only, but the alien life of many. For he himself had found another door into yet another planet and there might be many more such doors and what would these other

worlds be like, and what was the purpose of the doors?

Someone, *something*, had found a way of going to another planet short of spanning light-years of lonely space—a simpler and a shorter way than flying through the gulfs of space. And once the way was open, then the way stayed open and it was as easy as walking from one room to another.

But one thing—one ridiculous thing—kept puzzling him and that was the spinning and the movement of the connected planets, of all the planets that must be linked together. You could not, he argued, establish solid, factual links between two objects that move independently of one another.

And yet, a couple of days ago, he would have contended just as stolidly



THE BIG FRONT YARD

that the whole idea on the face of it was fantastic and impossible. Still it had been done. And once one impossibility was accomplished, what logical man could say with sincerity that the second could not be?

The doorbell rang and he got up to answer it.

It was Ernie, the oil man.

"Henry said you wanted some gas and I came to tell you I can't get it until morning."

"That's all right," said Taine. "I don't need it now."

And swiftly slammed the door.

He leaned against it, thinking: I'll have to face them sometime. I can't keep the door locked against the world. Sometime, soon or late, the Earth and I will have to have this out.

And it was foolish, he thought, for him to think like this, but that was the way it was.

He had something here that the Earth demanded; something that Earth wanted or thought it wanted. And yet, in the last analysis, it was his responsibility. It had happened on his land, it had happened in his house; unwittingly, perhaps, he'd even aided and abetted it.

And the land and house are mine, he fiercely told himself, and that world out there was an extension of his yard. No matter how far or where it went, an extension of his yard.

Beasley had left the kitchen and Taine walked into the living room. Towser was curled up and snoring gently in the gold-upholstered chair.

Taine decided he would let him stay there. After all, he thought, Towser had won the right to sleep anywhere he wished.

He walked past the chair to the window and the desert stretched to its far horizon and there before the window sat the man-size woodchuck and Beasley side by side, with their backs turned to the window and staring out across the desert.

Somehow it seemed natural that the chuck and Beasley should be sitting there together—the two of them, it appeared to Taine, might have a lot in common.

And it was a good beginning—that a man and an alien creature from this other world should sit down companionably together.

He tried to envision the setup of these linked worlds, of which Earth now was a part, and the possibilities that lay inherent in the fact of linkage rolled thunder through his brain.

There would be contact between the Earth and these other worlds and what would come of it?

And come to think of it, the contact had been made already, but so naturally, so undramatically, that it failed to register as a great, important meeting. For Beasley and the chuck out there were contact and if it all should go like that, there was absolutely nothing for one to worry over.

This was no haphazard business, he reminded himself. It had been planned and executed with the smoothness of long practice. This was

not the first world to be opened and it would not be the last.

The little ratlike things had spanned space—how many light-years of space one could not even guess—in the vehicle which he had unearthed out in the woods. They then had buried it, perhaps as a child might hide a dish by shoving it into a pile of sand. Then they had come to this very house and had set up the apparatus that had made this house a tunnel between one world and another. And once that had been done, the need of crossing space had been canceled out forever. There need be but one crossing and that one crossing would serve to link the planets.

And once the job was done the little ratlike things had left, but not before they had made certain that this gateway to their planet would stand against no matter what assault. They had sheathed the house inside the studdings with a wonder-material that would resist an ax and that, undoubtedly, would resist much more than a simple ax.

And they had marched in drill-order single file out to the hill where eight more of the space machines had rested in their cradles. And now there were only seven there, in their cradles on the hill, and the ratlike things were gone and, perhaps, in time to come, they'd land on another planet and other doorway would be opened, a link to yet another world.

But more, Taine thought, than the linking of mere worlds. It would be, as well, the linking of the peoples of those worlds.

The little ratlike creatures were the explorers and the pioneers who sought out other Earth-like planets and the creature waiting with Beasley just outside the window must also serve its purpose and perhaps in time to come there would be a purpose which Man would also serve.

He turned away from the window and looked around the room and the room was exactly as it had been ever since he could remember it. With all the change outside, with all that was happening outside, the room remained unchanged.

This is the reality, thought Taine, this is all the reality there is. Whatever else may happen, this is where I stand—this room with its fireplace blackened by many winter fires, the bookshelves with the old thumbed volumes, the easy-chair, the ancient worn carpet—worn by beloved and unforgotten feet through the many years.

And this also, he knew, was the lull before the storm.

In just a little while the brass would start arriving—the team of scientists, the governmental functionaries, the military, the observers from the other countries, the officials from U.N.

And against all these, he realized, he stood weaponless and shorn of his strength. No matter what a man might say or think, he could not stand off the world.

This was the last day that this would be the Taine house. After almost a hundred years, it would have another destiny.

And for the first time in all those years, there'd be no Taine asleep beneath its roof.

He stood looking at the fireplace and the shelves of books and he sensed the old, pale ghosts walking in the room and he lifted a hesitant hand as if to wave farewell, not only to the ghosts but to the room as well. But before he got it up, he dropped it to his side.

What was the use, he thought.

He went out to the porch and sat down on the steps.

Beasley heard him and turned around.

"He's nice," he said to Taine, patting the chuck upon the back. "He's exactly like a great big teddy bear."

"Yes, I see," said Taine.

"And best of all, I can talk with him."

"Yes, I know," said Taine, remembering that Beasley could talk with Towser, too.

He wondered what it would be like to live in the simple world of Beasley. At times, he decided, it would be comfortable.

The ratlike things had come in the spaceship, but why had they come to Willow Bend, why had they picked this house, the only house in all the village where they would have found the equipment that they needed to build their apparatus so easily and so quickly? For there was no doubt that they had cannibalized the computer to get the equipment they needed. In that, at least, Henry had been right. Thinking back on it, Henry,

after all, had played quite a part in it.

Could they have foreseen that on this particular week in this particular house the probability of quickly and easily doing what they had come to do had stood very high?

Did they, with all their other talents and technology, have clairvoyance as well?

"There's someone coming," Beasley said.

"I don't see a thing."

"Neither do I," said Beasley, "but Chuck told me that he saw them."

"Told you!"

"I told you we been talking. There, I can see them, too!"

And so could Taine.

They were far off, but they were coming fast—three dots that rode rapidly up out of the desert.

He sat and watched them come and he thought of going in to get the rifle, but he didn't stir from his seat upon the steps. The rifle would do no good, he told himself. It would be a senseless thing to get it; more than that, a senseless attitude. The least that Man could do, he thought, was to meet these creatures of another world with clean and empty hands.

They were closer now and it seemed to him that they were sitting in invisible easy-chairs that traveled very fast.

He saw that they were humanoid, to a degree at least, and there were only three of them.

They came in with a rush and stopped very suddenly a hundred feet

or so from where he sat upon the steps.

"He didn't move or say a word—there was nothing he could say. It was too ridiculous.

They were, perhaps, a little smaller than himself, and black as the ace of spades, and they wore skintight shorts and vests that were somewhat oversize and both the shorts and vests were the blue of April skies.

But that was not the worst of it.

They sat on saddles, with horns in front and stirrups and a sort of a bedroll tied on the back, but they had no horses.

The saddles floated in the air, with the stirrups about three feet above the ground and the aliens sat easily in the saddles and stared at him and he stared back at them.

Finally he got up and moved forward a step or two and when he did that the three swung from the saddles and moved forward, too, while the saddles hung there in the air, exactly as they'd left them.

Taine walked forward and the three walked forward until they were no more than six feet apart.

"They say hello to you," said Beasley. "They say welcome to you."

"Well, all right, then, tell them—Say, how do you know all this!"

"Chuck tells me what they say and I tell you. You tell me and I tell him and he tells them. That's the way it works. That is what he's here for."

"Well, I'll be—," said Taine. "So you can really talk to him."

"I told you that I could," stormed

Beasley. "I told you that I could talk to Towser, too, but you thought that I was crazy."

"Telepathy!" said Taine. And it was worse than ever now. Not only had the ratlike things known all the rest of it, but they'd known of Beasley, too.

"What was that you said, Hiram?"

"Never mind," said Taine. "Tell that friend of yours to tell them I am glad to meet them and what can I do for them?"

He stood uncomfortably and stared at the three and he saw that their vests had many pockets and that the pockets were all crammed, probably with their equivalent of tobacco and handkerchiefs and pocket knives and such.

"They say," said Beasley, "that they want to dicker."

"Dicker?"

"Sure, Hiram. You know, trade."

Beasley chuckled thinly. "Imagine them laying themselves open to a Yankee trader. That's what Henry says you are. He says you can skin a man on the slickest—"

"Leave Henry out of this," snapped Taine. "Let's leave Henry out of something."

He sat down on the ground and the three sat down to face him.

"Ask them what they have in mind to trade."

"Ideas," Beasley said.

"Ideas! That's a crazy thing—"

And then he saw it wasn't.

Of all the commodities that might be exchanged by an alien people, ideas would be the most valuable and

the easiest to handle. They'd take no cargo room and they'd upset no economies—not immediately, that is—and they'd make a bigger contribution to the welfare of the cultures than trade in actual goods.

"Ask them," said Taine, "what they'll take for the idea back of those saddles they are riding."

"They say, what have you to offer?"

And that was the stumper. That was the one that would be hard to answer.

Automobiles and trucks, the internal gas engine—well, probably not. Because they already had the saddles. Earth was out-of-date in transportation from the viewpoint of these people.

Housing architecture—no, that was hardly an idea and, anyhow, there was that other house, so they knew of houses.

Cloth? No, they had cloth.

Paint, he thought. Maybe paint was it.

"See if they are interested in paint," Taine told Beasley.

"They say, what is it? Please explain yourself."

"O.K., then. Let's see. It's a protective device to be spread over almost any surface. Easily packaged and easily applied. Protects against weather and corrosion. It's decorative, too. Comes in all sorts of colors. And it's cheap to make."

"They shrug in their mind," said Beasley. "They just slightly interested. But they will listen more. Go ahead and tell them."

And that was more like it, thought Taine.

That was the kind of language that he could understand.

He settled himself more firmly on the ground and bent forward slightly, flicking his eyes across the three dead-pan, ebony faces, trying to make out what they might be thinking.

There was no making out. Those were three of the deadest pans he had ever seen.

It was all familiar. It made him feel at home. He was in his element.

And in the three across from him, he felt somehow subconsciously, he had the best dickering opposition he had ever met. And that made him feel good, too.

"Tell them," he said, "that I'm not quite sure. I may have spoken up too hastily. Paint, after all, is a mighty valuable idea."

"They say, just as a favor to them, not that they're really interested, would you tell them a little more."

Got them hooked, Taine told himself. If he could only play it right—

He settled down to dickering in earnest.

VI

Hours later Henry Horton showed up. He was accompanied by a very urbane gentleman, who was faultlessly turned out and who carried beneath his arm an impressive attaché case.

Henry and the man stopped on the steps in sheer astonishment.

Taine was squatted on the ground

with a length of board and he was daubing paint on it while the aliens watched. From the daubs here and there upon their anatomies, it was plain to see the aliens had been doing some daubing of their own. Spread all over the ground were other lengths of half-painted boards and a couple of dozen old cans of paint.

Taine looked up and saw Henry and the man.

"I was hoping," he said, "that someone would show up."

"Hiram," said Henry, with more importance than usual, "may I present Mr. Lancaster. He is a special representative of the United Nations."

"I'm glad to meet you, sir," said Taine. "I wonder if you would—"

"Mr. Lancaster," Henry explained grandly, "was having some slight difficulty getting through the lines outside, so I volunteered my services. I've already explained to him our joint interest in this matter."

"It was very kind of Mr. Horton," Lancaster said. "There was this stupid sergeant—"

"It's all in knowing," Henry said, "how to handle people."

The remark, Taine noticed, was not appreciated by the man from the U.N.

"May I inquire, Mr. Taine," asked Lancaster, "exactly what you're doing?"

"I'm dickering," said Taine.

"Dickering. What a quaint way of expressing—"

"An old Yankee word," said Henry

quickly, "with certain connotations of its own. When you trade with someone you are exchanging goods, but if you're dickering with him you're out to get his hide."

"Interesting," said Lancaster. "And I suppose you're out to skin these gentlemen in the sky-blue vests—"

"Hiram," said Henry, proudly, "is the sharpest dickering in these parts. He runs an antique business and he has to dicker hard—"

"And may I ask," said Lancaster, ignoring Henry finally, "what you might be doing with these cans of paint? Are these gentlemen potential customers for paint or—"

Taine threw down the board and rose angrily to his feet.

"If you'd both shut up!" he shouted. "I've been trying to say something ever since you got here and I can't get in a word. And I tell you, it's important—"

"Hiram!" Henry exclaimed in horror.

"It's quite all right," said the U.N. man. "We *have* been jabbering. And now, Mr. Taine?"

"I'm backed into a corner," Taine told him, "and I need some help. I've sold these fellows on the idea of paint, but I don't know a thing about it—the principle back of it or how it's made or what goes into it or—"

"But, Mr. Taine, if you're selling them the paint, what difference does it make—"

"I'm not selling them the paint," yelled Taine. "Can't you understand

that? They don't want the paint. They want the *idea* of paint, the principle of paint. It's something that they never thought of and they're interested. I offered them the paint idea for the idea of their saddles and I've almost got it—"

"Saddles? You mean those things over there, hanging in the air?"

"That is right. Beasly, would you ask one of our friends to demonstrate a saddle?"

"You bet I will," said Beasly.

"What," demanded Henry, "has Beasly got to do with this?"

"Beasly is an interpreter. I guess you'd call him a telepath. You remember how he always claimed he could talk with Towser?"

"Beasly was always claiming things."

"But this time he was right. He tells Chuck, that funny-looking monster, what I want to say and Chuck tells these aliens. And these aliens tell Chuck and Chuck tells Beasly and Beasly tells me."

"Ridiculous!" snorted Henry. "Beasly hasn't got the sense to be . . . what did you say he was?"

"A telepath," said Taine.

One of aliens had gotten up and climbed into a saddle. He rode it forth and back. Then he swung out of it and sat down again.

"Remarkable," said the U.N. man. "Some sort of antigravity unit, with complete control. We could make use of that, indeed."

He scraped his hand across his chin.

"And you're going to exchange the

idea of paint for the idea of that saddle?"

"That's exactly it," said Taine, "but I need some help. I need a chemist or a paint manufacturer or someone to explain how paint is made. And I need some professor or other who'll understand what they're talking about when they tell me the idea of the saddle."

"I see," said Lancaster, "Yes, indeed, you have a problem. Mr. Taine, you seem to me a man of some discernment—"

"Oh, he's all of that," interrupted Henry. "Hiram's quite astute."

"So I suppose you'll understand," said the U.N. man, "that this whole procedure is quite irregular—"

"But it's not," exploded Taine. "That's the way they operate. They open up a planet and then they exchange ideas. They've been doing that with other planets for a long, long time. And ideas are all they want, just the new ideas, because that is the way to keep on building a technology and culture. And they have a lot of ideas, sir, that the human race can use."

"That is just the point," said Lancaster. "This is perhaps the most important thing that has ever happened to we humans. In just a short year's time we can obtain data and ideas that will put us ahead—theoretically, at least—by a thousand years. And in a thing that is so important, we should have experts on the job—"

"But," protested Henry, "you can't find a man who'll do a better dicker-ing job than Hiram. When you dicker

with him your back teeth aren't safe. Why don't you leave him be? He'll do a job for you. You can get your experts and your planning groups together and let Hiram front for you. These folks have accepted him and have proved they'll do business with him and what more do you want? All he needs is just a little help."

Beasley came over and faced the U.N. man.

"I won't work with no one else," he said. "If you kick Hiram out of here, then I go along with him. Hiram's the only person who ever treated me like a human—"

"There, you see!" Henry said, triumphantly.

"Now, wait a second, Beasley," said the U.N. man. "We could make it worth your while. I should imagine that an interpreter in a situation such as this could command a handsome salary."

"Money don't mean a thing to me," said Beasley. "It won't buy me friends. People still will laugh at me."

"He means it, mister," Henry warned. "There isn't anyone who can be as stubborn as Beasley. I know; he used to work for us."

The U.N. man looked flabbergasted and not a little desperate.

"It will take you quite some time," Henry pointed out, "to find another telepath—leastwise one who can talk to these people here."

The U.N. man looked as if he were strangling. "I doubt," he

said, "there's another one on Earth."

"Well, all right," said Beasley, brutally, "let's make up our minds. I ain't standing here all day."

"All right!" cried the U.N. man. "You two go ahead. Please, will you go ahead? This is a chance we can't let slip through our fingers. Is there anything you want? Anything I can do for you?"

"Yes, there is," said Taine. "There'll be the boys from Washington and bigwigs from other countries. Just keep them off my back."

"I'll explain most carefully to everyone. There'll be no interference."

"And I need that chemist and someone who'll know about the saddles. And I need them quick. I can stall these boys a little longer, but not for too much longer."

"Anyone you need," said the U.N. man. "Anyone at all. I'll have them here in hours. And in a day or two there'll be a pool of experts waiting for whenever you may need them—on a moment's notice."

"Sir," said Henry, unctuously, "that's most co-operative. Both Hiram and I appreciate it greatly. And now, since this is settled, I understand that there are reporters waiting. They'll be interested in your statement."

The U.N. man, it seemed, didn't have it in him to protest. He and Henry went tramping up the stairs.

Taine turned around and looked out across the desert.

"It's a big front yard," he said.

THE END

THE

YELLOW PILL



Any man must live in a subjective world; the problem is to maintain one that corresponds with the external world. And sometimes that can be remarkably difficult . . . for every man experiences directly only the subjective world!

BY ROG PHILLIPS

Illustrated by Vegh

DR. CEDRIC ELTON slipped into his office by the back entrance, shucked off his topcoat and hid it in the small, narrow-doored closet, then picked up the neatly piled patient cards his receptionist Helena Fitzroy had placed on the corner of his desk. There were only four, but there could have been a hundred if he accepted everyone who asked to be his patient, because his successes had more than once been spectacular and his reputation as a psychiatrist had become so great because of this that his name had become synonymous with psychiatry in the public mind.

His eyes flicked over the top card. He frowned, then went to the small square of one-way glass in the reception room door and looked through it. There were four police officers and a man in strait jacket.

The card said the man's name was Gerald Bocek, and that he had shot and killed five people in a supermarket, and had killed one officer

and wounded two others before being captured.

Except for the strait jacket, Gerald Bocek did not have the appearance of being dangerous. He was about twenty-five, with brown hair and blue eyes. There were faint wrinkles of habitual good nature about his eyes. Right now he was smiling, relaxed, and idly watching Helena, who was pretending to study various cards in her desk file but was obviously conscious of her audience.

Cedric returned to his desk and sat down. The card for Jerry Bocek said more about the killings. When captured, Bocek insisted that the people he had killed were not people at all, but blue-scaled Venusian lizards who had boarded his spaceship, and that he had only been defending himself.

Dr. Cedric Elton shook his head in disapproval. Fantasy fiction was all right in its place, but too many people took it seriously. Of course, it was not the fault of the fiction. The same type of person took other types

of fantasy seriously in earlier days, burning women as witches, stoning men as devils—

Abruptly Cedric deflected the control on the intercom and spoke into it. "Send Gerald Bocek in, please," he said.

A moment later the door to the reception room opened. Helena flashed Cedric a scared smile and got out of the way quickly. One police officer led the way, followed by Gerald Bocek closely flanked by two officers with the fourth one in the rear, who carefully closed the door. It was impressive, Cedric decided. He nodded toward a chair in front of his desk and the police officers sat the strait-jacketed man in it, then hovered nearby, ready for anything.

"You're Jerry Bocek?" Cedric asked.

The strait-jacketed man nodded cheerfully.

"I'm Dr. Cedric Elton, a psychiatrist," Cedric said. "Do you have any idea at all why you have been brought to me?"

"Brought to you?" Jerry echoed, chuckling. "Don't kid me. You're my old pal, Gar Castle. Brought to you? How could I get away from you in this stinking tub?"

"Stinking tub?" Cedric said.

"Spaceship," Jerry said. "Look, Gar. Untie me, will you? This nonsense has gone far enough."

"My name is Dr. Cedric Elton," Cedric enunciated. "You are not on a spaceship. You were brought to my office by the four policemen standing in back of you, and—"

Jerry Bocek turned his head and studied each of the four policemen with frank curiosity. "What policemen?" he interrupted. "You mean these four gear lockers?" He turned his head back and looked pityingly at Dr. Elton. "You'd better get hold of yourself, Gar," he said. "You're imagining things."

"My name is Dr. Cedric Elton," Cedric said.

Gerald Bocek leaned forward and said with equal firmness, "Your name is Gar Castle. I refuse to call you Dr. Cedric Elton because your name is Gar Castle, and I'm going to keep on calling you Gar Castle because we have to have at least one peg of rationality in all this madness or you will be cut completely adrift in this dream world you've cooked up."

Cedric's eyebrows shot halfway up to his hairline.

"Funny," he mused, smiling. "That's exactly what I was just going to say to you!"

Cedric continued to smile. Jerry's serious intenses slowly faded. Finally an answering smile tugged at the corners of his mouth. When it became a grin Cedric laughed, and Jerry began to laugh with him. The four police officers looked at one another uneasily.

"Well!" Cedric finally gasped. "I guess that puts us on an even footing! You're nuts to me and I'm nuts to you!"

"An equal footing is right!" Jerry shouted in high glee. Then abruptly

he sobered. "Except," he said gently, "I'm tied up."

"In a strait jacket," Cedric corrected.

"Ropes," Jerry said firmly.

"You're dangerous," Cedric said. "You killed six people, one of them a police officer, and wounded two other officers."

"I blasted five Venusian lizard pirates who boarded our ship," Jerry said, "and melted the door off of one food locker, and seared the paint on two others. You know as well as I do, Gar, how space madness causes you to personify everything. That's why they drill into you that the minute you think there are more people on board the ship than there were at the beginning of the trip you'd better go to the medicine locker and take a yellow pill. They can't hurt anything but a delusion."

"If that is so," Cedric said, "why are *you* in a strait jacket?"

"I'm tied up with ropes," Jerry said patiently. "You tied me up. Remember?"

"And those four police officers behind you are gear lockers?" Cedric said. "O.K., if one of those gear lockers comes around in front of you and taps you on the jaw with his fist, would you still believe it's a gear locker?"

Cedric nodded to one of the officers, and the man came around in front of Gerald Bocek and, quite carefully, hit him hard enough to rock his head but not hurt him. Jerry's eyes blinked with surprise, then he looked at Cedric and smiled.

"Did you feel that?" Cedric said quietly.

"Feel what?" Jerry said. "Oh!" He laughed. "You imagined that one of the gear lockers—a police officer in your dream world—came around in front of me and hit me?" He shook his head in pity. "Don't you understand, Gar, that it didn't really happen? Untie me and I'll prove it. Before your very eyes I'll open the door on your *Policeman* and take out the pressure suit, or magnetic grapple, or whatever is in it. Or are you afraid to? You've surrounded yourself with all sorts of protective delusions. I'm tied with ropes, but you imagine it to be a strait jacket. You imagine yourself to be a psychiatrist named Dr. Cedric Elton, so that you can convince yourself that you're sane and I'm crazy. Probably you imagine yourself a very *famous* psychiatrist that everyone would like to come to for treatment. World famous, no doubt. Probably you even think you have a beautiful receptionist? What is her name?"

"Helena Fitzroy," Cedric said.

Jerry nodded. "It figures," he said resignedly. "Helena Fitzroy is the Expediter at Mars Port. You try to date her every time we land there, but she won't date you."

"Hit him again," Cedric said to the officer. While Jerry's head was still rocking from the blow, Cedric said, "Now! Is it *my* imagination that your head is still rocking from the blow?"

"What blow?" Jerry said, smiling serenely. "I felt no blow."

"Do you mean to say," Cedric said

incredulously, "that there is no corner of your mind, no slight residue of rationality, that tries to tell you your rationalizations aren't reality?"

Jerry smiled ruefully. "I have to admit," he said, "when you seem so absolutely certain you're right and I'm nuts, it almost makes me doubt. Untie me, Gar, and let's try to work this thing out sensibly." He grinned. "You know, Gar, *one* of us has to be nuttier than a fruit cake."

"If I had the officers take off your strait jacket, what would you do?" Cedric asked. "Try to grab a gun and kill some more people?"

"That's one of the things I'm worried about," Jerry said. "If those pirates came back, with me tied up, you're just space crazy enough to welcome them aboard. That's why you *must* untie me. Our lives may depend on it, Gar."

"Where would you get a gun?" Cedric asked.

"Where they're always kept," Jerry said. "In the gear lockers."

Cedric looked at the four policemen, at their revolvers holstered at their hip, and sighed. One of them grinned feebly at him.

"I'm afraid we can't take your strait jacket off just yet," Cedric said. "I'm going to have the officers take you back now. I'll talk with you again tomorrow. Meanwhile I want you to think seriously about things. Try to get below this level of rationalization that walls you off from reality. Once you make a dent in it the whole delusion will vanish." He looked up at the officers. "All right, take him

away. Bring him back the same time tomorrow."

The officers urged Jerry to his feet. Jerry looked down at Cedric, a gentle expression on his face. "I'll try to do that, Gar," he said. "And I hope you do the same thing. I'm much encouraged. Several times I detected genuine doubt in your eyes. And—" Two of the officers pushed him firmly toward the door. As they opened it Jerry turned his head and looked back. "Take one of those yellow pills in the medicine locker, Gar," he pleaded. "It can't hurt you."

At a little before five thirty Cedric tactfully eased his last patient all the way across the reception room and out, then locked the door and leaned his back against it.

"Today was rough," he sighed.

Helena glanced up at him briefly, then continued typing. "I only have a little more on this last transcript," she said.

A minute later she pulled the paper from the typewriter and placed it on the neat stack beside her.

"I'll sort and file them in the morning," she said. "It was rough, wasn't it, doctor? That Gerald Bocek is the most unusual patient you've had since I've worked for you. And poor Mr. Potts. A brilliant executive, making half a million a year, and he's going to have to give it up. He seems so normal."

"He is normal," Cedric said. "People with above normal blood pressure often have very minor cerebral hem-

orrhages so small that the affected area is no larger than the head of a pin. All that happens is that they completely forget things that they knew. They can relearn them, but a man whose judgment must always be perfect can't afford to take the chance. He's already made one error in judgment that cost his company a million and a half. That's why I consented to take him on as a—Gerald Bocek really upset me, Helena. I *consent* to take a five hundred thousand dollar a year executive as a patient."

"He was frightening, wasn't he," Helena said. "I don't mean so much because he's a mass murderer as—"

"I know. I know," Cedric said. "Let's prove him wrong. Have dinner with me."

"We agreed—"

"Let's break the agreement this once."

Helena shook her head firmly. "Especially not now," she said. "Besides, it wouldn't prove anything. He's got you boxed in on that point. If I went to dinner with you, it would only show that a wish fulfillment entered your dream world."

"Ouch," Cedric said, wincing. "That's a dirty word. I wonder how he knew about the yellow pills? I can't get out of my mind the fact that *if* we had spaceships and *if* there was a type of space madness in which you began to personify objects, a yellow pill would be the right thing to stop that."

"How?" Helena said.

"They almost triple the strength of nerve currents from end organs.

What results is that reality practically shouts down any fantasy insertions. It's quite startling. I took one three years ago when they first became available. You'd be surprised how little you actually see of what you look at, especially of people. You look at symbol inserts instead. I had to cancel my appointments for a week. I found I couldn't work without my professionally built symbol inserts about people that enable me to see them—not as they really are—but as a complex of normal and abnormal symptoms."

"I'd like to take one sometime," Helena said.

"That's a twist," Cedric said, laughing. "One of the characters in a dream world takes a yellow pill and discovers it doesn't exist at all except as a fantasy."

"Why don't we both take one," Helena said.

"Uh uh," Cedric said firmly. "I couldn't do my work."

"You're afraid you might wake up on a spaceship?" Helena said, grinning.

"Maybe I am," Cedric said. "Crazy, isn't it? But there is one thing today that stands out as a serious flaw in my reality. It's so glaring that I actually am afraid to ask you about it."

"Are you serious?" Helena said.

"I am," Cedric nodded. "How does it happen that the police brought Gerald Bocek here to my office instead of holding him in the psychiatric ward at City Hospital and having me go there to see him? How

does it happen the D.A. didn't get in touch with me beforehand and discuss the case with me?"

"I . . . I don't know!" Helena said. "I received no call. They just showed up, and I assumed they wouldn't have without your knowing about it and telling them to. Mrs. Fortesque was your first patient and I called her at once and caught her just as she was leaving the house, and told her an emergency case had come up." She looked at Cedric with round, startled eyes.

"Now we know how the patient must feel," Cedric said, crossing the reception room to his office door. "Terrifying, isn't it, to think that if I took a yellow pill all this might *vanish*—my years of college, my internship, *my fame as the world's best known psychiatrist*, and you. Tell me, Helena, are you sure you aren't an Expediter at Marsport?"

He leered at her mockingly as he slowly closed the door, cutting off his view of her.

Cedric put his coat away and went directly to the small square of one-way glass in the reception room door. Gerald Bocek, still in strait jacket, was there, and so were the same four police officers.

Cedric went to his desk and, without sitting down, deflected the control on the intercom.

"Helena," he said, "before you send in Gerald Bocek get me the D.A. on the phone."

He glanced over the four patient cards while waiting. Once he rubbed

his eyes gently. He had had a restless night.

When the phone rang he reached for it. "Hello? Dave?" he said. "About this patient, Gerald Bocek—"

"I was going to call you today," the District Attorney's voice sounded. "I called you yesterday morning at ten, but no one answered, and I haven't had time since. Our police psychiatrist, Walters, says you might be able to snap Bocek out of it in a couple of days—at least long enough so that we can get some sensible answers out of him. Down underneath his delusion of killing lizard pirates from Venus there has to be some reason for that mass killing, and the press is after us on this."

"But why bring him to my office?" Cedric said. "It's O.K., of course, but . . . that is . . . I didn't think you could! Take a patient out of the ward at City Hospital and transport him around town."

"I thought that would be less of an imposition on you," the D.A. said. "I'm in a hurry on it."

"Oh," Cedric said. "Well, O.K., Dave. He's out in the waiting room. I'll do my best to snap him back to reality for you."

He hung up slowly, frowning. "*Less of an imposition!*" His whispered words floated into his ears as he snapped into the intercom, "Send Gerald Bocek in, please."

The door from the reception room opened, and once again the procession of patient and police officers entered.

"Well, well, good morning, Gar," Jerry said. "Did you sleep well? I could hear you talking to yourself most of the night."

"I am Dr. Cedric Elton," Cedric said firmly.

"Oh, yes," Jerry said. "I promised to try to see things your way, didn't I? I'll try to co-operate with you, Dr. Elton." Jerry turned to the four officers. "Let's see now, these gear lockers are policemen, aren't they. How do you do, Officers." He bowed to them, then looked around him. "And," he said, "this is your office, Dr. Elton. A very impressive office. That thing you're sitting behind is not the chart table but your desk, I gather." He studied the desk intently. "All metal, with a gray finish, isn't it?"

"All wood," Cedric said. "Walnut."

"Yes, of course," Jerry murmured. "How stupid of me. I really want to get into your reality, Gar . . . I mean Dr. Elton. Or get you into mine. I'm the one who's at a disadvantage, though. Tied up, I can't get into the medicine locker and take a yellow pill like you can. Did you take one yet?"

"Not yet," Cedric said.

"Uh, why don't you describe your office to me, Dr. Elton?" Jerry said. "Let's make a game of it. Describe parts of things and then let me see if I can fill in the rest. Start with your desk. It's genuine walnut? An executive style desk. Go on from there."

"All right," Cedric said. "Over here to my right is the intercom,

made of gray plastic. And directly in front of me is the telephone."

"Stop," Jerry said. "Let me see if I can tell you your telephone number." He leaned over the desk and looked at the telephone, trying to keep his balance in spite of his arms being encased in the strait jacket. "Hm-m-m," he said, frowning. "Is the number Mulberry five dash nine oh three seven?"

"No," Cedric said. "It's Cedar sev—"

"Stop!" Jerry said. "Let me say it. It's Cedar seven dash four three nine nine."

"So you did read it and were just having your fun," Cedric snorted.

"If you say so," Jerry said.

"What other explanation can you have for the fact that it is my number, if you're unable to actually see reality?" Cedric said.

"You're absolutely right, Dr. Elton," Jerry said. "I think I understand the tricks my mind is playing on me now. I read the number on your phone, but it didn't enter my conscious awareness. Instead, it cloaked itself with the pattern of my delusion, so that consciously I pretended to look at a phone that I couldn't see, and I thought, 'His phone number will obviously be one he's familiar with. The most probable is the home phone of Helena Fitzroy in Marsport, so I gave you that, but it wasn't it. When you said Cedar I knew right away it was your own apartment phone number.'"

Cedric sat perfectly still. Mulberry 5-9037 was actually Helena's apart-

ment phone number. He hadn't recognized it until Gerald Bocek told him.

"Now you're beginning to understand," Cedric said after a moment. "Once you realize that your mind has walled off your consciousness from reality, and is substituting a rationalized pattern of symbology in its place, it shouldn't be long until you break through. Once you manage to see one thing as it really is, the rest of the delusion will disappear."

"I understand now," Jerry said gravely. "Let's have some more of it. Maybe I'll catch on."

They spent an hour at it. Toward the end Jerry was able to finish the descriptions of things with very little error.

"You are definitely beginning to get through," Cedric said with enthusiasm.

Jerry hesitated. "I suppose so," he said. "I must. But on the conscious level I have the idea—a rationalization, of course—that I am beginning to catch on to the pattern of your imagination so that when you give me one or two key elements I can fill in the rest. But I'm going to try, really try—Dr. Elton."

"Fine," Cedric said heartily. "I'll see you tomorrow, same time. We should make the breakthrough then."

When the four Officers had taken Gerald Bocek away, Cedric went into the outer office.

"Cancel the rest of my appointments," he said.

"But why?" Helena protested.

"Because I'm upset!" Cedric said.

"How did a madman whom I never knew until yesterday know your phone number?"

"He could have looked it up in the phone book," Helena said.

"Locked in a room in the psychiatric ward at City Hospital?" Cedric said. "How did he know your name yesterday?"

"Why," Helena said, "all he had to do was read it on my desk here."

Cedric looked down at the brass name plate.

"Yes," he grunted. "Of course. I'd forgotten about that. I'm so accustomed to it being there that I never see it."

He turned abruptly and went back into his office.

He sat down at his desk, then got up and went into the sterile whiteness of his compact laboratory. Ignoring the impressive battery of electronic instruments he went to the medicine cabinet. Inside, on the top shelf, was the glass stoppered bottle he wanted. Inside it were a hundred vivid yellow pills. He shook out one and put the bottle away, then went back into his office. He sat down, placing the yellow pill in the center of the white note pad.

There was a brief knock on the door to the reception room and the door opened. Helena came in.

"I've canceled all your other appointments for today," she said. "Why don't you go out to the golf course? A change will do you—" She saw the yellow pill in the center of the white note pad and stopped.

"Why do you look so frightened?" Cedric said. "Is it because, if I take this little yellow pill, you'll cease to exist?"

"Don't joke," Helena said.

"I'm not joking," Cedric said. "Out there, when you mentioned about your brass name plate on your desk, when I looked down it was blurred for just a second, then became sharply distinct and solid. And into my head popped the memory that the first thing I do when I have to get a new receptionist is get a brass name plate for her, and when she quits I make her a present of it."

"But that's the truth," Helena said. "You told me all about it when I started working for you. You also told me that while you still had your reason about you I was to solemnly promise that I would never accept an invitation from you for dinner or anything else, because business could not mix with pleasure. Do you remember that?"

"I remember," Cedric said. "A nice pat rationalization in any man's reality to make the rejection be my own before you could have time to reject me yourself. Preserving the ego is the first principle of madness."

"But it isn't!" Helena said. "Oh, darling, I'm *here*! This is *real*! I don't care if you fire me or not. I've loved you forever, and you mustn't let that mass murderer get you down. I actually think he isn't insane at all, but has just figured out a way to seem insane so he won't have to pay for his crime."

"You think so?" Cedric said, in-

terested. "It's a possibility. But he would have to be as good a psychiatrist as I am— You see? Delusions of grandeur."

"Sure," Helena said, laughing thinly. "Napoleon was obviously insane because he thought he was Napoleon."

"Perhaps," Cedric said. "But you must admit that if you are real, my taking this yellow pill isn't going to change that, but only confirm the fact."

"And make it impossible for you to do your work for a week," Helena said.

"A small price to pay for sanity," Cedric said. "No, I'm going to take it."

"You aren't!" Helena said, reaching for it.

Cedric picked it up an instant before she could get it. As she tried to get it away from him he evaded her and put it in his mouth. A loud gulp showed he had swallowed it.

He sat back and looked up at Helena curiously.

"Tell me, Helena," he said gently. "Did you know all the time that you were only a creature of my imagination? The reason I want to know is—"

He closed his eyes and clutched his head in his hands.

"God!" he groaned. "I feel like I'm dying! I didn't feel like this the other time I took one."

Suddenly his mind steadied, and his thoughts cleared. He opened his eyes.

On the chart table in front of him

the bottle of yellow pills lay on its side, pills scattered all over the table. On the other side of the control room lay Jerry Bocek, his back propped against one of the four gear lockers, sound asleep, with so many ropes wrapped around him that it would probably be impossible for him to stand up.

Against the far wall were three other gear lockers, two of them with their paint badly scorched, the third with its door half melted off.

And in various positions about the control room were the half charred bodies of five blue scaled Venusian lizards.

A dull ache rose in Gar's chest. Helena Fitzroy was gone. Gone, when she had just confessed she loved him.

Unbidden, a memory came into Gar's mind. Dr. Cedric Elton was the psychiatrist who had examined him when he got his pilot's license for third-class freighters—

"God!" Gar groaned again. And suddenly he was sick. He made a dash for the washroom, and after a while he felt better.

When he straightened up from the wash basin he looked at his reflection in the mirror for a long time, clinging to his hollow cheeks and sunken eyes. He must have been out of his head for two or three days.

The first time. Awful! Somehow, he had never quite believed in space madness.

Suddenly he remembered Jerry. Poor Jerry!

Gar lurched from the washroom back into the control room. Jerry was awake. He looked up at Gar, forcing a smile to his lips.

"Hello, Dr. Elton," Jerry said.

Gar stopped as though shot.

"It's happened, Dr. Elton, just as you said it would," Jerry said, his smile widening.

"Forget that," Gar growled. "I took a yellow pill. I'm back to normal again."

Jerry's smile vanished abruptly. "I know what I did now," he said. "It's terrible. I killed six people. But I'm sane now. I'm willing to take what's coming to me."

"Forget that!" Gar snarled. "You don't have to humor me now. Just a minute and I'll untie you."

"Thanks, doctor," Jerry said. "It will sure be a relief to get out of this strait jacket."

Gar knelt beside Jerry and untied the knots in the ropes and unwound them from around Jerry's chest and legs.

"You'll be all right in a minute," Gar said, massaging Jerry's limp arms. The physical and nervous strain of sitting there immobilized had been rugged.

Slowly he worked circulation back into Jerry, then helped him to his feet.

"You don't need to worry, Dr. Elton," Jerry said. "I don't know why I killed those people, but I know I would never do such a thing again. I must have been insane."

"Can you stand now?" Gar said, letting go of Jerry.

Jerry took a few steps back and forth, unsteadily at first, then with better co-ordination. His resemblance to a robot decreased with exercise.

Gar was beginning to feel sick again. He fought it.

"You O.K. now, Jerry boy?" he asked worriedly.

"I'm fine now, Dr. Elton," Jerry said. "And thanks for everything you've done for me."

Abruptly Jerry turned and went over to the air-lock door and opened it.

"Good-by now, Dr. Elton," he said.

"Wait!" Gar screamed, leaping toward Jerry.

But Jerry had stepped into the air lock and closed the door. Gar tried to open it, but already Jerry had turn-

ed on the pump that would evacuate the air from the lock.

Screaming Jerry's name senselessly in horror, Gar watched through the small square of thick glass in the door as Jerry's chest quickly expanded, then collapsed as a mixture of phlegm and blood dribbled from his nostrils and lips, and his eyes enlarged and glazed over, then one of them ripped open and collapsed, its fluid draining down his cheek.

He watched as Jerry glanced toward the side of the air lock and smiled, then spun the wheel that opened the air lock to the vacuum of space, and stepped out.

And when Gar finally stopped screaming and sank to the deck, sobbing, his knuckles were broken and bloody from pounding on bare metal.

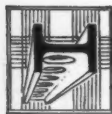
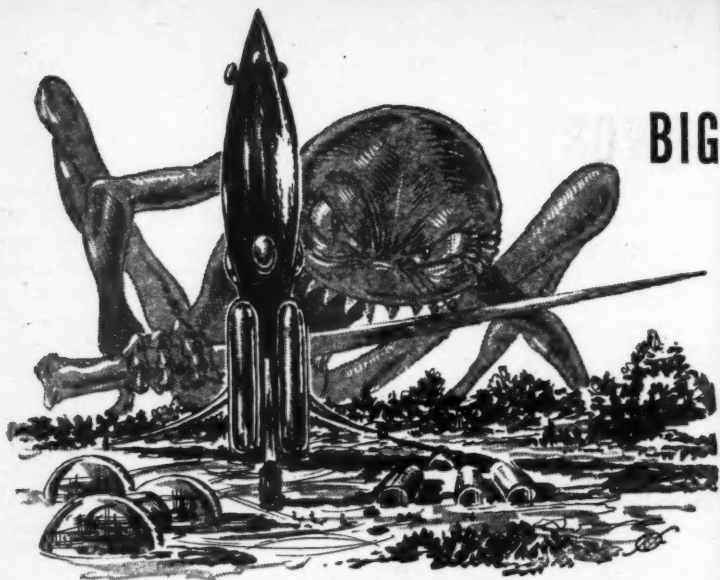
THE END

IN TIMES TO COME

Next issue leads off with a wonderful two-part yarn entitled "A Bicycle Built For Brew," concerning, principally, an old Danish rocket engineer, a Martian professor, with tentacles and a Bavarian costume, operating a beer hall, an oversize Irishman engaged in a "war" between asteroid "nations," and an assortment of the darndest fun ever to thumb its nose at the profundities of Science Fiction.

It's strongly recommended. We positively guarantee that you will learn nothing useful from it . . . but you'll have some fun!

THE EDITOR



HE WAS taller than the tallest by nearly an inch, because the pod that hatched him had hung on the Tree more than twenty days longer than the rest, kept from ripening by all the arts at the People's command. The flat spike sheathed in his left thigh was, like the rest of him, abnormally large: but it was because he represented their last defense that they gave him the name, if a thought-sign can be called that, of "Big Sword."

He was a leader from his birth,

because among the People intelligence was strictly proportional to size. They had two kinds of knowledge: Tree-knowledge, which they possessed from the moment they were born; and Learned-knowledge, the slow accumulation of facts passed on from one generation to another with the perfect accuracy of transmitted thought, which again was shared by all alike. The Learned-knowledge of the People covered all the necessities that they had previously experienced: but now they were faced with a wholly new danger and they

ASTOUNDING SCIENCE FICTION

G...SWORD

BY PAUL ASH

There must be a stage in developing intelligence where one is bright enough to know a terrible problem exists... and to know that the solution requires more intelligence than you have....

Illustrated by van Dongen

needed somebody to acquire the Learned-knowledge to deal with it. So they made use of the long-known arts that could delay ripening of the pods on the Tree. These were not used often, because neighboring pods were liable to be stunted by the growth of an extra-large one, but now there was the greatest possible need for a leader. The Big Folk, after two years of harmlessness, had suddenly revealed themselves as an acute danger, one that threatened the life of the People altogether.

Tree-knowledge Big Sword had, of course, from the moment of his hatching. The Learned-knowledge of the People was passed on to him by a succession of them sitting beside him in the treetops while his body swelled and hardened and absorbed the light. He would not grow any larger: the People made use of the stored energy of sunlight for their activities, but the substance of their

bodies came from the Tree. For three revolutions of the planet he lay and absorbed energy and information. Then he knew all that they could pass on to him, and was ready to begin.

A week later he was sitting on the edge of a clearing in the forest, watching the Big Folk at their incomprehensible tasks. The People had studied them a little when they first appeared in the forest, and had made some attempt to get in touch with them, but without success. The Big Folk used thought all right, but chaotically: instead of an ordered succession of symbols there would come a rush of patterns and half-patterns, switching suddenly into another set altogether and then returning to the first, and at any moment the whole thing might be wiped out altogether. Those first students of the People, two generations ago, had thought that there was some connec-

tion between the disappearance of thought and the vibrating wind which the Big Folk would suddenly emit from a split in their heads. Big Sword was now certain that they were right, but the knowledge did not help him much. After the failure of their first attempts at communication the People, not being given to profitless curiosity, had left the Big Folk alone. But now a totally unexpected danger had come to light. One of the Big Folk, lumbering about the forest, had cut a branch off the Tree.

When they first arrived the Big Folk had chopped down a number of trees—ordinary trees—completely and used them for various peculiar constructions in the middle of the clearing, but that was a long time ago and the People had long since ceased to worry about it. Two generations had passed since it happened. But the attack on the Tree itself had terrified them. They had no idea why it had been made and there was no guarantee that it would not happen again. Twelve guardians had been posted round the Tree ready to do anything possible with thought or physical force to stave off another such attack, but they were no match for the Big Folk. The only safety lay in making contact with the Big Folk and telling them why they must leave the Tree of the People alone.

Big Sword had been watching them for two days now and his plan was almost ready. He had come to the conclusion that a large part of the difficulty lay in the fact that the

Big People were hardly ever alone. They seemed to go about in groups of two or three and thought would jump from one to another at times in a confusing way: then again you would get a group whose thoughts were all completely different and reached the observer in a chaotic pattern of interference. The thing to do, he had decided, was to isolate one of them. Obviously the one to tackle would be the most intelligent of the group, the leader, and it was clear which one filled that position: he stood out among his companions as plainly as Big Sword. There were one or two factors to be considered further, but that evening, Big Sword had decided, he would be ready to act.

Meanwhile the Second Lambdan Exploratory Party had troubles of their own. Mostly these were the professional bothers that always accompany scientific expeditions; damaged equipment, interesting sidelines for which neither equipment nor workers happened to be available, not enough hours in the day. Apart from that there was the constant nag of the gravitation, twenty per cent higher than that of Earth, and the effect, depressing until you got used to it, of the monochromatic scenery, laid out in darker and lighter shades of black and gray. Only the red soil and red rocks varied that monotony, with an effect which to Terrestrial eyes was somewhat sinister. Nevertheless, the Expedition were having fewer troubles than they expected.

Lambda, apparently, was a thoroughly safe planet. Whatever those gray-and-black jungles might look like it appeared that they had nothing harmful in them.

At thirty light-years away from Earth most personal troubles had got left behind, John James Jordan, however, the leader of the party, had brought his with him. His most urgent responsibility was in the next cabin, in bed and, it was to be hoped, asleep.

There was no doubt about it, a man who made his career in space had no business to get married. Some men, of course, could take their wives with them: there were three married couples on the expedition, though they were with the first party at base on the coast. But for a spaceman to marry a woman and leave her at home didn't make sense.

He wondered, now, what he had thought he was doing. Marriage had been a part of that hectic interval between his first expedition and his second, when he had arrived home to find that space exploration was News and everybody wanted to know him. He had been just slightly homesick, that first time. The idea of having somebody to come back to had been attractive.

The actual coming back, three years later, had not been so good. He had had time to realize that he scarcely knew Cora. Most of their married life seemed to have been spent at parties: he would arrive late, after working overtime, and find Cora already in the thick of it.

He was going to have more responsibility preparing for the third expedition: he was going to have to spend most of his time on it. He wondered how Cora was going to take it. She had never complained when he wasn't there, during the brief period of their married life: but somehow what he remembered wasn't reassuring.

Just the same, it was a shock to find that she had divorced him a year after his departure—one of the first of the so-called "space divorces." It was a worse shock, though, to find that he now had a two-year-old son.

The rule in a space divorce was that the divorced man had the right to claim custody of his children, providing that he could make adequate arrangements for them during his absence. That would have meant sending Ricky to some all-year-round school. There was no sense to that. Cora's new husband was fond of him. Jordan agreed to leave Ricky with his mother. He even agreed, three years later on his next leave, not to see Ricky—Cora said that someone had told the little boy that her husband was not his real father and contact with somebody else claiming that position was likely to upset him.

Once or twice during his Earth-leaves—usually so crammed with duties that they made full-time exploration look like a holiday—Jordan got news of Cora. Apparently, she was a rising star in the social world. He realized, gradually, that she had

married him because for a brief time he had been News, and could take her where she wanted to be. He was vaguely relieved that she had got something out of their marriage: it was nice that somebody did. He was prepared to grant her doings the respect due to the incomprehensible. Nevertheless he was worried, for a moment, when he heard that she had been divorced yet again and remarried—to a prominent industrialist this time. He wondered how Ricky had taken it.

His first actual contact with Cora in about seven years came in the form of a request from her lawyer that he should put his signature to an application for entrance to a school. Merely a formality. The insistence on that point roused his suspicions and he made some inquiries about the school in question.

Half an hour after getting answers he had found Cora's present address, booked a passage on the Trans-equatorial Flight and canceled his engagements for the next twenty-four hours.

He was just in time to get aboard the flier. He had taken a bundle of urgent papers with him and he had three hours of flight in which to study them, but he hardly tried to do so. His conscience felt like a Lothornian cactus-bird trying to break out of the egg.

Why on Earth, why in Space, why in the Universe hadn't he taken some sort of care of his son?

He had never visited Antarctica

City before and he found it depressing. With great ingenuity somebody had excavated a building-space in the eternal ice and filled it with a city which was an exact copy of all the other cities. He wondered why anybody had thought it worth while.

Cora's house seemed less a house than an animated set for a stereo on *The Life of the Wealthy Classes*. It had been decorated in the very latest style—he recognized one or two motifs which had been suggested by the finds of the First Lambdan Expedition, mingled with the usual transparent furniture and electrified drapes. He was contemplating a curious decorative motif, composed of a hooked object which he recognized vaguely as some primitive agricultural implement and what looked like a pileman's drudge—but of course that particular mallet-shaped had passed through innumerable uses—when Cora came in.

Her welcome was technically perfect: it combined a warm greeting with just a faint suggestion that it was still open to her to have him thrown out by the mechman if it seemed like a good idea. He decided to get the business over as soon as possible.

"What's the matter with Ricky, Cora? Why do you want to get rid of him?"

Cora's sparkle-crusted brows rose delicately.

"Why, Threejay, what a thing to say?"

The idiotic nickname, almost forgotten, caught him off balance for a

moment, but he knew exactly what he wanted to say.

"This school you want to send him to is for maladjusted children. It takes complete responsibility, replacing parents—you wouldn't be allowed to see him for the next three years at least."

"It's a very fine school, Threejay. Camillo insisted we should send him to the best one available."

Camillo must be the new husband.

"Why?" repeated Jordan.

The welcome had drained right out of Cora's manner. "May I ask why this sudden uprush of parental feeling? You've never shown any interest in Ricky before. You've left him to me. I'm not asking you to take any responsibility. I'm just asking you to sign that form."

"Why?"

"Because he's unbearable! Because I won't have him in the house! He pries round—there's no privacy. He finds out everything and then uses it to make trouble. He's insulted half our friends. Camillo won't have him in the house and neither will I. If you don't want him to go to that school, perhaps you'll suggest an alternative."

Jordan was shaken, but tried not to show it. "I'd like to see him, Cora."

As swiftly as it had arisen Cora's rage sank out of sight. "Of course you can see him, Threejay!" She turned to the wall-speaker and murmured briefly into it. "Who knows, maybe the sight of a really, truly father is all he needs! You can just

have a nice fatherly chat with him before you have to catch your flier back, and then he'll settle down and turn into a model citizen."

The door slid open and a boy came quietly in. He was a very neat and tidy boy, small for his age, with a serious, almost sad expression. He said gently, "Good morning, Cora."

Cora spoke over her shoulder. "Ricky, dear, who do you think this is?"

Ricky looked at the visitor and his eyes widened.

"You . . . you're Dr. Jordan, aren't you? You wrote that book about Cranil—it's called 'The Fossil Planet.' And I saw you on the stereo two nights ago. You were talking about that place where all the forests are gray and black. And—" Ricky stopped with his mouth half open. His face went blank.

"That's who I am," said Jordan gravely.

"I know." Ricky swallowed. "But you're here . . . I mean . . . this sounds silly, but I suppose . . . I mean, you wouldn't be my father, would you?"

"Don't put on an act, Ricky," said Cora harshly. "You know perfectly well he's your father."

Ricky turned rather white. He shook his head. "No, honestly. I knew my father's name was Jordan, but I just didn't connect it up. I say—" he stopped short.

"Yes, Ricky?"

"I suppose you wouldn't have time to talk to me a little? About Lambda,

I mean. Because I really am interested—not just kid stuff. I want to be a xenobiologist.”

Cora laughed, a delicate metallic sound.

“Why be so modest, Ricky? After all, he’s your father. He’s apparently decided it’s time he took an interest in you. He’s due back to that place that fascinates you so much in a week or two, so I don’t see how he’ll do that unless he takes you with him. Why not ask him to?”

Ricky went scarlet and then very pale. He looked quickly away, but not before Jordan had had time to see the eager interest in his face replaced by sick resignation.

“Why shouldn’t you take him, Threejay?” went on Cora. “These Mass-time ships have lots of room. You’ve decided that it’s time you were responsible for him instead of me. Those books he reads are full of boys who made good in space. Why don’t you—”

“Yes, why don’t I?” said Jordan abruptly.

“Don’t!” said Ricky sharply. “Please, don’t! Honestly, I know it’s a joke . . . I mean I don’t read that kid stuff now . . . but—”

“No joke,” said Jordan. “As Cora says, there’s lots of room. Do you want to come?”

And I’d had my psycho check only the week before, reflected Jordan, and they didn’t find a thing.

He noticed suddenly that a report was moving through the scanner on his desk—the latest installment of

Woodman’s researches on the sexual cycles of Lambdan fresh-water organisms. He’d intended to read that tonight instead of mulling over all this stuff about Ricky.

He pushed the switch back to the beginning, but it was no use. He remembered how he had felt—how Cora’s needling had made him feel—and how Ricky had looked when he grasped that the proposal was serious. No chance at all of backing out then—not that he had wanted to. It was true that, with Mass-time flight, there was plenty of room; one feature of the drive was that within certain limits the bigger the ship the faster it would go. And he had complete authority over the selection of personnel for this second expedition, which was to reinforce the team already settled on Lambda. Ricky’s inclusion was taken with a surprising lack of concern by the rest of the staff. And it had looked as though his insane action was working out all right. Until the last two days Ricky had been no trouble at all.

If anything, Ricky had been too desperately anxious to keep out of the way and avoid being a nuisance, but he had seemed completely happy. Jordan’s project of getting to know him had never got very far, because his time was fully occupied, but Ricky had spent the weeks before blast-off mainly in the Interstellar Institute, chaperoned by young Woodman, who had taken a fancy to him. Jordan had taken time out once or twice during that period to worry over the fact that he was

hardly seeing the boy, but once they got aboard ship it would be different.

Once aboard ship, absorbed in checking stores and setting up projects to go into operation as soon as they landed, it was—once the party's settled and working, it'll be different. He'd have some time to spare.

Unfortunately that hadn't been soon enough. He should have paid some attention to Cora. She wouldn't have got worked up like that over nothing. She had said Ricky made trouble. He'd done that all right. And Jordan had known nothing about it till it attained the dimensions of a full-blown row.

Rivalry on the expedition was usually friendly enough. Unfortunately Cartwright and Penn, the two geologists, didn't get on. They had different methods of working and each was suspicious of the value of the other's work. But without Ricky they wouldn't have come to blows on it.

Quite accidentally the riot had been started by Ellen Scott. As soil specialist she had an interest in geology. Talking to Cartwright she had happened to say something about the date of the Great Rift. Cartwright had shot out of his chair.

"Ellen—where did you get that idea? Who told it to you?"

Ellen looked surprised.

"I thought you did, Peter. The Great Rift's your pet subject. If you didn't, I suppose it was Penn."

"I haven't mentioned it to anyone. I only worked it out a couple of days ago. It's in my notes now, on

my desk. Penn must have been going through them. Where is he?"

"Calm down, Peter!" Ellen got to her feet in astonishment. "Probably he worked it out too—you may have mentioned something that set him on the track. He must have mentioned it to me in the last few days, I think . . . that is, if he was the one who told me." She looked puzzled. "I don't remember discussing it with him. No, I believe—" she broke off suddenly and refused to say any more. Cartwright, unmollified, strode off to look for Penn. Dr. Scott departed in search of Ricky.

"Ricky, do you remember a day or two ago we were talking about the Great Rift?"

Ricky looked up from the microscope he was using.

"Sure," he said. "Why?" His smile faded and he began to look worried. "What's happened?"

"You remember you said something about the date—that it was about fifteen thousand years ago? You did say that, didn't you?"

Ricky's expression had faded to a watchful blank, but he nodded.

"Well, who told you that? How did you know?"

"Somebody said it," said Ricky flatly. He did not sound as though he expected to be believed.

Ellen Scott frowned.

"Listen, Ricky. Dr. Cartwright's got the idea that somebody must have looked through the papers on his desk and read that date. He says he didn't mention it to anyone. There

may be trouble. If you did get curious and took a look at his notes—well, now is the time to say so. It's not a good thing to have done, of course, but nobody'll pay much attention once it's cleared up."

"I didn't look," said Ricky wretchedly. "I don't remember how I knew, but I didn't look. Honestly not."

Unfortunately by that time Cartwright and Penn had already started arguing which ended with both of them crashing through the wall of the dining cabin—which had not been built to take assaults of that kind—and throwing Barney the cook into a kind of hysterics. After that Jordan came on the scene.

Ricky had come and told him about it all. At least, he'd said that he had somehow learned that the date of the Great Rift had been fixed, and had mentioned it to Dr. Scott while they were talking about geology. He didn't know how he had learned it. He denied looking through Cartwright's papers.

It was something that he had told the story, but then he must have thought that Ellen Scott would if he didn't.

Jordan's thoughts wandered off to Ellen for a moment. She was another person who believed that people who chose to work on alien planets must avoid personal ties. How right she was.

Nothing more had happened. Cartwright and Penn seemed to be on somewhat better terms, having purged their animosity. But Ricky had been going round with a haunt-

ed and hopeless look on his face and Jordan was going crazy trying to think up an approach to the matter which would not drive the boy still further away from him. But if he really made a habit of prying into private papers—and Cora had accused him of just that, after all—something must be done about it.

But what?

Jordan sighed, turned the viewer back to the beginning again and started to concentrate on Woodman's report. He had read three frames when the silence was split by a terrified bellow from the direction of the forest.

"Uelph! Uelph! Dewils. Uelph!"

Jordan shot through the door, grabbing a flashlight on the way. It was hardly needed: three moons were in the sky and their combined light was quite enough to show him the huge shape blundering among the cabins.

"Barney!" he shouted. "Stand still! What's the matter?"

Barney—seventeen stone on Earth, over twenty on Lambda—came to a halt and blinked at the flashlight. He put up a huge hand, feeling at his face. He seemed to be wearing some sort of mask or muffler over his mouth—otherwise he was draped in flannelette pajamas of brilliant hue and was barefooted. He ripped off the muffler—whatever it was—and threw it away. His utterance was a little clearer, but not much.

"Dewils in a voresh. Caught eee. Woot ticky tuff on a wouth."



BIG SWORD

He was gasping and sweating and Jordan was seriously worried. Barney was a superb cook, but he was apt to get excited and the extra gravitation of Lambda produced a slight strain on his heart. At that moment Ricky appeared like a silent shadow at his father's elbow.

"What's the matter with him?" As usual the boy looked neat and alert, although at the moment he was wearing pajamas and a robe. Jordan gestured towards his cabin.

"Take Barney in there and see what's sticking his mouth up." Several other people had appeared by this time, including Ellen Scott in a brilliant robe and Woodman in rumpled pajamas. Jordan sent Ellen to switch on the overhead floods and organized a search party.

Half an hour later Barney's mouth had been washed free from the gummy material which had been sticking his lips together and he was in some shape to explain.

"I woke up suddenly lying out in the forest. All damp it was." He groaned faintly. "I can feel my lumbago coming on already. I was lyin' flat on my back and there was somethin' over my arms—rope or somethin'. My mouth was all plastered up and there was a thing sittin' on my chest. I got a glimpse of it out of the crack of me eyes, and then it went. There was more of them round. They was shoutin'."

"Shouting?" repeated Jordan. "You mean just making a noise?"

"No, sir, they was shouting in English. I couldn't hear what, but it

was in words all right. They said 'People.' That was the only word I got, but that's it right enough. 'People.' Then I got my arms free and started to swipe around. I got hold of one of them and it stung me and I let it go."

He pointed to a neat puncture wound in the flesh at the base of his thumb. Jordan got out antiseptics and bathed it.

"I got up and ran back," Barney went on. "I was only a little way into the forest—I could still see the lights here. I ran as hard as I could but me feet kept slippin'." The light of remembered panic was in his eyes. "They stuck somethin' over me mouth—I couldn't breathe. It took me hours to get it off. I dunno what it was."

"It was a leaf," said Woodman. He produced a large leaf, perhaps twenty inches long: it was dark gray and one surface was smeared with a dully shining substance. "It's been coated with some kind of vegetable gum."

"But how did you get into the forest, Barney?" demanded Dr. Scott.

Barney shook his head miserably.

"He walked," said another of the party. "On his own. Tracks of his feet in the mud. You've been sleep-walking, Barney."

"Then where did he get the gag?" demanded Woodman. "This gum comes from a plant which is quite rare and there aren't any within a hundred yards of the clearing. Besides, we found the place where he'd been lying. A couple of saplings were

bent over and the ends shoved in the mud—those were used to hold his arms down, I reckon. No, he was attacked all right, but what did it?"

"I suppose," said Dr. Scott slowly, "this couldn't have been somebody's idea of a joke?"

There was a brief silence. Ricky looked up suddenly and caught his father's eye. His face went rigid, but he said nothing.

"We shall have to assume it wasn't," said Jordan. "That means precautions. We always assumed that Lambda was a safe planet. Apparently we were wrong. Until we know what happened no one goes out alone. Those of you who have observations to make outside will have to work in pairs and with your radios turned on. We'll arrange for a monitor on all the individual frequencies. The floods had better stay on tonight and we'll have a patrol—three men keeping in touch. Two hours for each of us. Doc, will you see to Barney?"

The medical officer nodded and took Barney off to his cabin, and its specially-strengthened bunk. Jordan looked thoughtfully at his son.

"You'd better get back to bed, Ricky. Unless you have anything to contribute."

Ricky was standing stiffly upright. "I haven't," he said.

"Get along, then. Now about this patrol—"

Jordan put himself on the first shift of the patrol—he wouldn't be able to sleep. Why in Space had he brought Ricky? Either he had

brought him into danger or—worse—Ricky was somehow at the bottom of this. He spent a good deal of time running errands for Barney. He had not seemed to mind it, but how did you tell what a boy was thinking? Might he have thought it funny to send big Barney lumbering in panic through the forest? And how could he have done it?

Jordan remembered that Ricky had once been found reading the article on Hypnosis in the Terrestrial Encyclopedia.

And if Ricky was innocent, what could be at the bottom of that ludicrous and inefficient attack?

In the top of the tallest tree available, Big Sword waited for daylight and brooded over the failure of his plan.

It was easy enough to get the biggest of the Big Folk into the forest. He had discovered that for part of the time they lay folded out flat in their enclosures, with their eyes shut, and during this time they were more sensitive to suggestion than when they were active. Big Sword, whose own eyes had an internal shutter, found eyelids rather fascinating; he had been tempted to experiment with Barney's but had refrained. He thought bitterly that he might as well have done so.

He had summoned twelve of the People and all of them thinking together had got the Big Person to its feet and walking. It had occurred to Big Sword that the receptiveness of the Big Person might be improved if

they got it to lie down again. He had further decided that, in view of the blanking-out of thought when the creatures began to blow through their face-split, this aperture had better be shut.

That, he now knew, had been a mistake. No sooner was the gummed leaf in place on the Big Person's face than its eyes had popped open and showed every sign of coming right out of its face. There had been just warning enough in its thoughts for the band of People to hop out of range, except for Big Sword, who had had to use his spike for the first time in his life, to get free. Then the great arms had swung dangerously about and the creature had thrashed to its feet. After that there was no hope of making contact. Its mind was in a turmoil, making the People actively uncomfortable: they had retreated as far as they could, until the interwoven lives of trees and other forest creatures were sufficiently interposed to reduce the Big Person's thoughts to a comfortable intensity.

Big Sword had been surprised by the low level of intelligence shown by the Big Person. It had made no effort at all to understand him—its thoughts were a much worse muddle than any of the others he had investigated. Perhaps he had made a mistake? Perhaps size among these monsters was not directly connected with intelligence? Or perhaps it was an inverse relationship?

Big Sword was suddenly desperately thirsty and tired. He slid into the

rain-filled cup of an enormous leaf—to soak up water through the million mouths of his skin and make his plans afresh.

The camp next morning was subdued and rather weary. Nobody had got their full sleep. Now there was all the awkward business of rearranging a full-time research program so that nobody should have to go into the forest alone. The lurking menace which last night had provided a formidable thrill, this morning was nothing more than a vague, dreary uneasiness. Furthermore there was always the possibility that it would turn out to be nothing more than the work of an ingenious kid with a distorted sense of humor. And nobody liked to think what that would do to Jordan.

The working parties dispersed. Those whose work took them to the laboratory sheds tried to concentrate on it. Ricky, who had decided that this was not a morning for wrestling with lessons, slipped off to see if Barney wanted any odd jobs done, and was sent to pick fresh beans in the hydroponics shed.

The mechanical job helped to keep his mind steady. Having once got out of a nightmare, it was creeping round him again. This time with a difference.

There had got to be an explanation somewhere.

When he had left the house in Antarctica he had seemed to leave all his troubles behind. No more need to keep a continual watch on

himself, in case he let something out. No more temptation, when in spite of himself he had put his foot in it again, to come out with something really startling and see what they could do about it. He was free. He had been free for months.

Then it started happening all over again. He had heard all sorts of scientific gossip—people here talked shop all the time. How was he to know what he'd heard and what he hadn't? How could he stop this happening again, now that whatever it was had followed him out here?

There was just one ray of hope. He couldn't possibly have had anything to do with what happened to Barney. If he could only find out what did that, some real solid explanation he could show everybody, then he might somehow be able to tell someone of the way he seemed to pick up knowledge without noticing it, knowledge he had no right to have—

Anyway, doing something was better than just sitting and waiting for things to go wrong again.

He delivered the beans to the kitchen and wandered out. The raw, red earth of the clearing shone like paint in the sun. In places he could still see the traces of Barney's big feet, going and coming, leading into the forest. There, among the black leaves and blacker shadows, lurked some real, genuine, tangible menace you could go for with a stick. There was a good supply of sticks stacked by his father's cabin for the benefit

of the working parties. Ricky provided himself with one.

Big Sword had finished drinking—or bathing, whichever way you looked at it—and had climbed out of the diminished pool in the leaf-cup to spread his membranes in the sun. He looked like a big bat, lying spread out on the leaf. The black webs that stretched between his arms and legs and his sides would snap back into narrow rolls when he wanted to move, but when he extended them to catch the sunlight they covered a couple of square feet. They absorbed all the light in the visible range and well into the ultraviolet and infrared. Like most organisms on Lambda, Big Sword supported himself by a very efficient photosynthesis.

He had only just begun to make up for the wear and tear of the night—continuous activity in the dark was exhausting—when he felt the call out of the forest.

"Longfoot is going, Big Sword. Longfoot is going on the Journey. You wished to see. Come quickly!"

Big Sword's membranes snapped into thin ridges along his arms and legs and he bounded off among the trees. The Long Journey was mysterious to him, as it was to all of the People before the urge actually came to them—but the rest were content to leave it as a mystery. Big Sword wanted to know more.

He came in flying leaps to the edge of the forest, where the trees stopped short on the edge of the Great Rift. Some twenty or so of the People were

gathered on the edge of the sheer cliff. Longfoot sat among them, his legs twitching occasionally with the urge to be off. As Big Sword arrived Longfoot shot to his feet, eager to depart.

"Where are you going?" demanded Big Sword. "What will you find over there, Longfoot? Why do you want to cross the waste, with no water and no shade? You will be dried to a stick before you get half-way across."

But Longfoot's mind was shut off; he had no longer any interest in Big Sword, or the People, or the danger to the Tree. He did not know why he had to go down on to the waste of boulders and small stones, but the urge could no longer be resisted. He dropped over the edge of the cliff, bouncing from ledge to ledge until he reached the bottom, and set off across the wide, rock-strewn plain, along the lines of shadow cast by the newly-risen sun.

Big Sword watched him sadly. He himself was nearly a year away from feeling that call which had come to Longfoot, and the thought of his own journeying did not trouble him yet. He had been warned early of the dangers of going out on to the waste and, with the habit of logical thought strongly cultivated in him, he was troubled about what would happen. The waste stretched almost as far as he could see—at least twelve miles. At the end of it was the dark line which might have been a far-off continuation of the Forest. But why Longfoot should have wished to go

there, or the many thousands of the People who had made that journey before him, Big Sword could not see.

He went back into the forest and found another perch on the edge of the clearing. Few of the Big People were in sight. He was conscious of vague alarms emanating from those who were within reach—it was an emotion foreign to his experience, but he disliked it. He wondered how to set about detaching a specimen from the group, since the direct method had proved unsuitable.

He became suddenly and sharply aware that one had detached itself already and was coming slowly towards him.

Ricky had seen the little black figure sail out of the shadows and land on an equally black leaf. It took all his concentration to make it out when it had stopped moving, but he at last managed to fix its position. Slowly, casually, he wandered towards it, observing it out of the corner of his eye.

Its body was a blob perhaps four inches long and its head about half of that, joined on by a short neck. It rested on its bent fore-limbs and the hind legs stuck up like those of a grasshopper; they looked to be at least twice as long as trunk and head together. As he sidled closer Ricky could make out the big convex eyes, gray with black slitlike pupils, filling more than half the face. Ricky knew the fauna list of Lambda by heart; this creature was not on it. It must

be one of Barney's "little devils" all right.

The creature sat quietly on its big leaf as he approached, with no sign of having noticed him. Now it was just within his reach if he stretched up. One more step and he would be right under it—ahhhh!

He had only begun to grab when Big Sword bounced over his head, landed lightly on the ground behind him and leaped sideways into another tree.

Ricky turned, slowly, and began his careful stalk again. He was murmuring softly to himself, coaxing words derived from rabbit- and guinea-pig owners of his acquaintance: "Come on, come on! Come to uncle. He won't hurt you. Nothing to be afraid of. Come on, you little brute. Come—"

Big Sword sailed away from his grasping hand to land on a branch ten feet farther into the forest.

Ricky had entirely forgotten the prohibition on leaving the clearing; he had forgotten everything except the desire to get hold of this creature, to have it close enough to examine, to hold it gently in his hands and get it tame. His stick lay forgotten on the earth outside the forest.

Big Sword was getting irritated and slightly flustered. It was easy enough to avoid getting caught, but he didn't wish to play tag with this creature, he wanted to tame it, to make it understand him. And its mind seemed to be shut. What was more, every so often it would begin that infuriating blowing process

which seemed to drain away its thoughts out of his reach. To know when it was going to grab he had to watch it the whole time. Finally he took refuge on a branch ten feet above its head and sat down to consider.

Ricky, at the bottom of the tree, was experiencing all the emotions of a dog which has treed a squirrel and now has to persuade it to come within reach. Apparently he was licked. If only the little beast would drop on to that branch there—where that applelike object was—and begin to eat it, perhaps, so that it could forget he was there . . .

Suddenly, the little brute did. At least it dropped to the lower branch and put its long-fingered hands on the round knob. Ricky's mouth opened in amazement.

His hands itched, but he kept them firmly at his sides. Perhaps he had been standing there so long that it had forgotten about him and thought he was part of the landscape. Perhaps if he spread his arms out very, very slowly it would take them for branches and—

Something like a small explosion happened inside his head. He blinked and gasped, forgetting all about immobility. He froze again hastily, expecting the creature to be out of sight. But it was still there.

Big Sword observed this reaction to his vehement negative with stirrings of hope. The idea of doing what this creature wanted, as a means of starting communication by demonstration, had seemed a singularly

forlorn one. But the Big Creature had clearly noticed *something*.

Big Sword decided that it was time to try a suggestion of his own. He thought—hard—on the proposition that the Big Creature should turn around and look the other way.

The Big Creature ducked its head and blinked its eyes again. Big Sword got the impression that these reactions were caused by the strength of his thought. He tried again, gently.

Something was getting through.

Weakly, faintly he felt a negative reply. The Big Creature refused to turn its back.

Big Sword put out another suggestion. Let the Big Creature take one step sideways, away from him.

Hesitantly, the Big Person did. Big Sword copied its direction in a joyful leap and ended on a level with the creature's head.

The next thought reached him, fuzzy but comprehensible. "If you understand me, put your hands on top of your head."

Watching suspiciously for any sud-



den move, Big Sword obeyed. The posture was not one he could keep up for long without losing his balance, but he felt the sudden surge of excitement in the Big Creature and was encouraged.

"Now watch! I shall sit down on the ground. Do you understand what that means? I'm going to sit down."

The Big Creature folded up in an awkward way; its knees were on the wrong side of its body, but Big Sword recognized the operation. He followed it with a thought of his own.

"I will spread my membranes out."

The Big Creature's astonishment was a dazzling shock and he put out a protest. In reply came something which could be an apology. He sharpened his thoughts and put out the next one with all the clearness at his command.

"We have proved that we can make contact. Now we have to practice thinking to and fro until we understand clearly."

He had just felt the other's incoherent agreement when the interruption began. Another of the Big Creatures came lumbering between the trees.

"Ricky! Scatter my stuffing, what are you doing here? You'll be in the doghouse for sure. Do you want Barney's little black devils to carry you away?"

Ricky scrambled to his feet in alarm.

"Sorry, Dr. Woodman, I forgot.

I was . . . looking at things and I came in here without thinking. I'm awfully sorry."

"No harm done. Come out before we have any more alarms and excursions."

Big Sword felt an impulse of despair from the Big Creature which he had at last succeeded in taming; it seemed to regret this interruption even more than he did. It was anxious that the second Big Creature should not see him, so he remained still, one dark shape among many and effectively invisible; but he sent a thought after the tame one: "Come again! I will be on the edge of the clearing. Come again!" and was nearly knocked over by the energy of its reply.

Woodman marched Ricky firmly out of the forest.

"Now you're here you may as well be useful. I want to go up to my pet pool and I can't find a chaperone. If I've timed it rightly, we should find something interesting up there."

Ricky summoned up a show of polite interest. Normally he would have been delighted.

"Is it the pseudohydras again?"

"That's right. Remember when we saw them catching those things like two-tailed torpedoes?"

"Yes, but you said all the ones in the pool had been eaten now."

"They have. Here we are. Don't lean over like that—they won't like your shadow. Lie down. So!"

Ricky lay on his belly and stared down into the transparent water. Except where it was shadowed it reflect-

ed the brilliant blue of the sky; the only thing on Lambda that had a familiar color. He felt, suddenly, stirrings of homesickness, but they vanished quickly. Homesick, when the most wonderful thing possible had just happened? Nonsense!

He concentrated on the pseudo-hydras. They lived just where the pool overflowed into a small brown stream. Each consisted mainly of a network of branching white threads, up to six inches long, issuing from a small blobby body anchored on the stones. There were perhaps fifty of them, and together their tentacles made a net across the mouth of the stream which nothing larger than a wheat-grain could escape. The sluggish waters of the stream must all pass through this living mesh, carrying anything unlucky enough to swim out of the pool; the tentacles were immensely sticky and could hold struggling creatures several times the size of the pseudohydra's own body, until the flesh of the tentacles had flowed slowly around them and enclosed them in a capsule whose walls slowly digested them away.

"See there?" whispered Woodman.

Here and there one of the tentacles ended in a transparent, hard-edged blob. Small dark cigar-shaped objects jerked uneasily within it, perhaps a dozen in each little case.

"It's caught some more torpedoes!" whispered Ricky. "Little tiny ones this time."

"Not caught," answered Woodman. "I thought they'd be ripe to-

day! Watch that one—it's nearly ready to split."

A few minutes later the capsule indicated did split. The tiny torpedo shapes, three or four millimeters long, spilled out into the water. They hovered uncertainly, veering here and there under the uneven propulsion of the water-jets emerging from the two-pronged hind end. Ricky gasped.

"It's let them go! And look—there's one rubbing against a tentacle and not getting caught. What's happened?"

Two of the little torpedo shapes came together. They jerked uncertainly round each other, then swiveled to lie parallel. They moved off together.

Others were paired already. One pair separated as Ricky watched them. The two little torpedoes shot off crazily. One came right under his eyes and he saw that it was emitting a faint milky stream.

Woodman's hand came down, holding a pipette. The torpedo veered off. Woodman sucked up a drop of water and held out the pipette.

"There," he said softly. Tiny specks, barely visible, floated in the drop.

"Eggs," said Woodman.

"Eggs! But—these are babies. The other ones were much bigger."

"So they were, Ricky. Do you know what these are going to hatch into? More torpedoes? Not on your life! Unless there's something else

crazy about the life cycle, these will hatch into little pseudohydras."

Ricky rolled over to stare at him. "But what are the big torpedoes, then?"

"This is how I see it. You know about the reproductive cycles in Coelenterates, back on Earth? Especially hydroids like Obelia and so on? The sessile ones reproduce by budding for a while. Then they start to produce buds which don't turn out like the parents. Those break off and go swimming away on their own. They feed and get big and in the end they produce eggs or sperm, and the fertilized eggs produce a new sessile generation. Well, here the free-living forms—the torpedoes—are ready to lay eggs as soon as they're released. They mate a few minutes after hatching and lay eggs as soon as they're fertilized. But after that they aren't finished. They go swimming around the pool and feed and get fat. And when they're full grown, they come swimming back to the old pseudohydras, and the pseudohydras eat them and use the food to produce a whole new crop of little torpedoes. Get it?"

Ricky scowled. "What a disgusting animal."

"Nonsense! It's a beautiful piece of natural economy. Don't be a snob. Ricky. Just because no terrestrial organism evolved this way you think it's unethical. Some Earth creatures beat pseudohydra hollow for nastiness—think of some of the parasites. Think of the barnacles, degenerate males parasitic on the female. There

just aren't any ethics in evolution except that the species shall survive, if you call that an ethic."

Ricky looked at him doubtfully. "We've evolved. And we bother about other species, too."

Woodman nodded. "We try to—some of us. But our survival has meant that a good many other species didn't."

Something else occurred to Ricky. "This sort of whatsit—alternate generations—has evolved lots of times on Earth, hasn't it?"

"Sure. Dozens of different lines evolved it independently, not to mention all the Lambdan forms that have it, and a few on Arcturus III, and some on Roche's—it's one of the basic dodges, apparently. One stage makes the most of the *status quo* and the other acts as an insurance against possible changes. Once a well-balanced set of hereditary characters has appeared it can repeat itself fast by asexual reproduction, without the disorganization of chromosome reassortment and so on. On the other hand, should conditions change, a sexually produced population has a much better chance of showing up a few adaptable forms. Some lines of life have dropped the sexual stage, just as some have dropped the asexual, but it probably doesn't pay in the long run."

"How does a stage get dropped?"

Woodman considered. "I suppose the first stage might go like this: one single asexual stage—one of these pseudohydras, for instance—happens to get isolated. Say all the rest in the

pool die off. It can produce its little torpedoes, but there are no mates for them. The pseudohydra goes on reproducing asexually—you've seen how they split down the middle—and in the end a mutant form occurs which doesn't waste its substance producing useless torpedoes and that breeds faster than the others and in the end replaces them. That's just one way it could happen. In one of the African lakes there used to be annual swarms of jellyfish, all male. One single asexual stage must have got trapped in that lake, God knows how long ago, and it went on producing those useless male jellyfish century after century, while asexual reproduction kept the species going."

"What happened to it?"

Woodman scowled. "Silly fools polluted the lake with industrial waste and the jellyfish died out. Come on, it's time for lunch."

Ellen Scott put away the last of her soil samples and scowled thoughtfully at her apparatus. Tensions in the camp were mounting and everyone was snapping at everybody else. One party had decided that Barney's adventure was somehow due to Ricky, and wanted to call off the precautions that hindered their work. The other stuck to it that Ricky could not have organized it and that precautions were still necessary. Anyway, who in the other party was prepared to tell Doc that there was no danger in the forest except for his son?

Ellen told herself that she was

neutral. She didn't know whether or not Ricky was behind their troubles and didn't much care, if only he would leave off tearing his father's nerves to pieces. She had heard a little gossip about him on Earth after it had been announced that he was to join the expedition, and though she had discounted it at the time, after the business of Cartwright's report she was inclined to believe it.

People whose work lay in space had no business with marriage and children. She had decided that for herself years ago. You could run planetary research properly, or you could run a family properly. Not both. Children were part of life on Earth, the settled pattern of security, with which she had grown so bored, was necessary to them. When they were older, perhaps—Ricky had seemed perfectly happy at first.

But what on Lambda was the matter with him now? He'd been going around in a dream ever since the night of Barney's adventure. Starting suddenly to talk to himself, breaking off with equal suddenness and an air of annoyance. He didn't seem now to be particularly worried by the suspicions floating around the camp, although he seemed the sort of sensitive boy to be desperately upset by them. In fact over that affair with Cartwright he had been upset, and this affair was worse.

And Jordan was obviously heading for a nervous breakdown if this went on much longer.

Ricky, lying in his cabin and theoretically taking his afternoon rest

—imposed because of Lambda's longer day—had come to the conclusion that it was time to tell his father about his Research. Despite his absorption in his overwhelming new interest, he was vaguely aware that the grown-ups were getting bothered. For another he could now "talk" fluently with Big Sword and haltingly with the rest of the People; he knew what they wanted and there was no excuse for delaying any longer. Besides, the results of Research were not meant to be kept to oneself, they were meant to be free to everyone.

He allowed himself to think for a moment about the possibilities of his newly-discovered power. Of course, people had been messing about with telepathy for centuries, but they had never got anywhere much. Perhaps only a fully-developed telepath, coming of a race to which telepathy was the sole method of communication, could teach a human being how to control and strengthen his wayward and uncertain powers. Or perhaps, thought Ricky, the people who were really capable of learning the trick got into so much trouble before they could control it that they all simply shut it off as hard as they could, so that the only ones who tried to develop it were those in whom it never became strong enough to do anything useful. He himself had now, at last, learned how to shut off his awareness of other minds; it was the first necessity for clear reception that one should be able to deafen oneself to all minds

except one. It occurred to him that he'd better make that point clear straight off: that he was not going to eavesdrop on anyone else's thoughts. Never again.

But obviously the thing had terrific potentialities for research, not only into the difficult and thorny problem of the connection between mind and matter, or into contact with alien races. Why, he could probably find out what really went on in the minds of terrestrial animals, those that had minds; and he could find out what it was that people experienced in a Mass-Time field, which they could never properly remember afterwards, and—oh, all sorts of things!

Ricky got up from his bunk. His father ought to be free at this moment; it was the one time of day he kept to himself, unless an emergency happened. Quite unconsciously Ricky opened his mind to thoughts from that direction, to see whether it was a good time to visit his father's cabin.

The violence of the thought he received nearly knocked him over. What on Lambda was stirring old Doc J. up to such an extent? And—bother, he was talking to somebody—Woodman, apparently. Ricky, unlike Big Sword, could still pick up thought at the moment when it drained into the level of speech, but even for him it was highly indistinct. He strained, trying to catch the cause of all this commotion. Woodman had found something—something unpleasant—something—

Ricky dashed out of the cabin door and crossed the half-dozen yards that separated his hut from his father's. Just outside the voices were clearly distinct; Woodman was speaking excitedly and loudly.

"It was absolutely devilish! Oh, I suppose it was physical—some sort of miasma—in fact it nearly knocked me down, but it felt just exactly as though somebody were standing and hating me a few yards off. Like that feeling you get after space 'flu, as though nobody loves you, only this was magnified about a million times—the most powerful depressant ever, and absolutely in the open air, too."

"Where was this?"

"The eighth sector—just about here."

He was evidently pointing to a map. Cold with apprehension, Ricky deliberately tried to probe into his father's mind, to see just what they were looking at. The picture was fuzzy and danced about, but he could see the pointer Jordan was using—the ivory stylus he always carried, and—yes, that was the clearing in the forest that housed the Tree itself! The guards about it had been all too successful in their efforts to keep intruders away.

Jordan laughed harshly. "Do you remember that we scheduled this planet as safe?" He got to his feet. "First Barney encounters devils and now you've discovered the Upas Tree. You're sure this gas or whatever it is came from the plants?"

"I'm certain it was this one particular tree. It's by itself in the middle

of an open space. The feeling began when I was six feet from it. It has big pods—they may secrete the toxic stuff. Though it must be intermittent—I collected a branch once before and didn't feel anything. Perhaps it's seasonal."

"Well, it'll have to come down."

Ricky, horrified, felt his father's savage satisfaction at coming across an enemy he could deal with. "Ellen wants to push her soil examinations out in that direction—it's the only sector we haven't covered yet and a good many people want to work there."

Ricky, horrified, straightened from his crouching position under the window and appeared like a jack-in-the-box over the sill.

"You mustn't, Doc! Honestly you mustn't. That Tree's terribly important. It's only—"

"Ricky!" Jordan lunged to his feet, scattering objects across his desk. "Were you listening to my conversation?"

Ricky turned white. "Yes, I was, but—"

"Go to your cabin."

Woodman made a move to intervene, but Jordan brushed it aside.

"I'll speak to you later. For the moment, you'll go to your cabin and stay there, until I have time to deal with you."

Woodman thought that Ricky was about to make some further protest, but after a moment's tension he turned and bolted.

Jordan picked up the stylus with a trembling hand.



"I'll come with you and investigate this thing at once, Woodman. We'll need masks and an air-sampler, and we may as well take one of those portable detection kits. Can you draw them from the store, please, and be ready in ten minutes. Get a blaster, too."

Woodman thought of arguments and decided against them. Old Jordan had been stewing up for something like this for the last week and it was probably better to let him get it out of his system. When it came

to the point Jordan wouldn't start destroying things without careful consideration; he was too good a scientist for that. Woodman didn't know why Ricky was so concerned, but he himself would take good care that a possibly unique specimen wasn't damaged in a hurry. He went for the equipment.

Jordan hesitated at the entrance to Ricky's cabin. He heard a slight movement within, and moved on. He was still trembling with a fury that he only half understood, and knew that he was in no state to conduct a delicate interview, or even to think straight. Better leave the boy alone until he had got things sorted out in his own mind.

Ricky, lying tense on his bunk, "listened" with all his power. Old Woodman didn't really approve of this expedition, made in such a hurry. Good. Doc J. was half aware that his own brain wasn't working straight. Good again. Ricky spared a moment to wish that he had given more thought to his father during the last week, but it was too late for that now. Even if Jordan didn't take a blaster to the Tree straight off the People were still perched on the thin edge of disaster. For the first time since he had understood what Big Sword wanted him to do, Ricky began to doubt whether it could be done. Were people going to listen to him? Were Doc. J. and Woodman and Miss Ellen and the rest of them really any different from Cora and Camillo and all the other people on Earth who didn't even try to understand?

No, there was only one way to make the People safe—if it would work. And he'd *got* to take it. Because this was his own fault for not telling Doc. J. sooner. He'd acted like a silly kid, wanting to keep his secret to himself just a little longer. Well, now he was not going to act like a silly kid. He was going to put things right, if he could—righter than they were before. With any luck it would be hours before anyone missed him. He might even be able to do what he wanted and call back on his transmitter to explain before they found that he had gone.

Ricky was already out of the clearing before Jordan, who had started

out with Woodman, turned back to speak to Dr. Scott.

"Ellen, I've left Ricky in his cabin. We had a . . . disagreement. I think he's better left to himself just now, but would you mind going to his cabin in an hour or so, to see that he's all right?"

"Of course, John. But what—?"

"No time now. I'll explain later. Thank you, Ellen. Good-by."

There was no undergrowth in the forest—but the branches were extremely thick and the darkness beneath them almost complete. Jordan, following Woodman through the trees and the slow pace enforced by these conditions, felt his anger drain away and a deep depression take its place. What sort of showing had he made, either as a father or as the head of the expedition? This particular episode was quite idiotic. There was nothing in Woodman's report to call for this immediate dash into the forest. He should at least have stopped to find out what Ricky knew about it—and now that he was cooling off, Ricky's anxiety seemed more and more puzzling. If it weren't that to turn back would make him look even more of a fool than he did already, he would have given up and gone to find out what the boy knew.

In front of him Woodman came to a halt.

"That's it, sir! That's the Tree! But—there's no feeling about it now."

Jordan brushed past him.

"Stay here. Be ready to put your

mask on." He walked slowly forward until he was right under the branches of the Tree.

On either side of the clearing, sitting in the treetops, the Guardians consulted anxiously.

"We must not try to drive them away," the Contact said. "Yes, we must do as he suggested."

Jordan looked up at the branches and dared them to depress him.

"I don't feel anything," he said at last. "Woodman, are you certain this is the right tree?"

"Well, I was, sir." Woodman approached it in growing doubt. "All these little clearings are so much alike, I could have—no, it is the right one! I tied my handkerchief to this branch for a marker, before I bolted. Here it is."

The Guardians gave the telepathic equivalent of a sigh and started on the next line of defense.

"You know, sir—" Woodman was carefully deferential—"I've never seen another specimen like this. After all, this little bit of the Forest is pretty well cut off—the Rift on one side, the Mountains on the other and the River in the south. This type of soil doesn't even extend as far as the River. You might get forms here which were unique — relics, or species evolved since the Rift opened. I don't feel we ought to destroy it without very good reason."

Jordan scowled up at the nearest pod.

"I wasn't proposing to destroy it here and now! If the thing is a potential menace we must find out

about it, that's all. I must say I don't . . . what's that?"

The sound of snapping twigs could be heard back along the path. Woodman started down it with Jordan at his heels; it was so dark that he was almost on top of Dr. Scott before he saw her.

"John! Thank goodness. Listen, you've got to come back at once. It's . . . it's Ricky. He's gone. I went to his cabin like you said, and he wasn't there. He isn't anywhere in camp. He's gone."

There was a flurry in the camp, but it was an organized flurry. Jordan, white and sick-looking, nevertheless had himself well under control. Important facts were sorted out quickly.

Three parties working on the east side of the clearing could swear that Ricky had not passed them.

Various delicate gadgets which responded violently to the movement of humans anywhere near them were rigged in the wood to the north, which was taboo in consequence. They showed no sign of disturbance.

That left the south and the west. South was a stretch of about eight miles of forest, unbroken until it reached the big river. West was about half a mile of forest, fairly well explored, and then the Great Rift.

"There'd be no sense in going that way." Jordan laid a pointer on the map to indicate the Rift; he noticed in a detached way that his hand was quite steady. "It doesn't lead any-

where. There's just one place he could be making for, if we assume him to have an intelligible plan, and that is the First Base on the coast. The one way he could possibly get there would be to get to the river and float down it on one of the lografts—we saw plenty of them coming down while we were at the base."

"But the rapids—" said somebody.

"Has anyone reason to suppose that Ricky knew about the rapids?" Beads of sweat stood out on Jordan's forehead. No one answered. "We have to find him before he gets there. Unless any of you can suggest another way he might be trying to go."

Nobody cared to suggest that Ricky, if he had flung off in blind panic, might be headed nowhere in particular under the shade of the black trees. On the south side the paths went only for half a mile or so, and if he left them he could be lost within a hundred yards of the camp. They had already tried to pick up the tracker he was supposed to carry, but he had evidently switched it off or thrown it away.

The geologist, Penn, spoke suddenly from the back of the group.

"How about the Rift? It interested him. He might try to get across."

"That's possible," said Jordan. "On the Rift he'd be relatively easy to spot. That's why I propose to leave it till later. We have only one heliflier. If he's gone through the forest to the River we have to catch him at once. He's been gone two and a half hours. If he went straight

to the nearest point of the river he might be there by now. The heliflier's the only chance. I can patrol the whole stretch and spot him as soon as he comes to it. If he hasn't reached it by dawn, I'll go back and fly over the Rift. If he does happen to be there, he won't take much harm in that time."

"There are two helifliers," someone suggested.

"No," said Jordan sharply. "The other is unsafe."

Not all the party were to join the hunt at once.

"There are only a few profitable lines," said Jordan. "We don't want everybody exhausted at the same time. This may be more than one day's search. And some of you have long-term observations to continue." He raised his hand, stilling a protest. "If to take all of you would increase the . . . the speed with which we are likely to find Ricky by one per cent, or half that, I'd take you all. But I won't ruin several months' work for nothing."

In the end several parties set out through the trees south and one went west. Jordan had already taken the one serviceable heliflier and departed. They had arranged an automatic sound-signal to go off every half hour in the clearing, in case Ricky was lost and trying to find his way back, and there were flares and a searchlight for when it became dark.

Ellen Scott had been left behind as part of the "reinforcements." She managed to catch Woodman before his party left.

"You used the second heliflier, didn't you? What's wrong with it?"

Woodman grimaced. "It failed to co-operate over landing. I got down intact by the skin of my incisors and had to walk home—we fetched it finally on the truck. I found a rough patch on one of the power planes and cleaned it up. That may or may not have been the cause of the trouble. We haven't got checking equipment here and nobody's tried it out the hard way. Leave it alone, Ellen. When those things are good they're very very good. Once they act up—leave them alone. It wouldn't be any use over the Forest and Doc. J. won't miss anything on the River."

"How about the Rift?"

"Why should he go there? He was upset but he wasn't crazy. No, he must have set out for the base camp—probably thinks he'll be treated as a hero if he gets there. I'll give him heroics next time we meet."

Ellen was occupied for the next hour with various laboratory jobs to be done for members of the search party. Reports came in every few minutes over the radio, but they were all negative. The ground was hard dry. If Ricky had stuck to the broken trails, he would leave no sign. Even off them, he was small enough to walk under the trees where a grown man would have had to push his way through. There were three chances: to see him from the air, to get a fix on his radio, and to come upon him among the trees. And however systematic the searchers

were they knew perfectly well that they could only do that by chance.

Unless one could guess where he had gone. Jordan thought he had guessed.

Ellen prowled restlessly about. What would Ricky have done? Nothing had been taken from his room; had he set out without any equipment at all?

She went to the kitchen. Barney was muddling around among his store-cupboards, in a very bad mood. He had wanted to go with the search parties and had been turned down.

"Barney," said Ellen quickly, "did Ricky take any food?"

"That's what I'm trying to check, Miss. There's some biscuits gone, I think. He could have taken them, or it could have been anyone this afternoon. And I think one of the big canteens has gone, but I suppose a search party took it."

"They didn't," said Ellen sharply. "There are always plenty of streams, apart from the pools in the leaves. They only took small water bottles."

"One of the big canteens has gone," repeated Barney obstinately. "And one of the water bottles isn't, if you take my meaning—Ricky did not take one of those, I mean, I've accounted for them. The canteen I can't account for. But Ricky wouldn't lumber himself up with that," he added morosely. "He couldn't carry it if it was more than half full, and he knows about the streams as well as anybody. No, I reckon someone pinched it for a collecting tin or something. That's how it goes in

this place, and now we can see what comes of it. You can't keep a proper check on anything—"

But Dr. Scott had gone.

She waited, fuming, until the party which had gone west came back.

"Yes, we looked over the Rift all right," said the leader morosely. "Hell, Ellen, the whole place is a heat-trap. With the haze and flickers visibility is about twenty yards. Even from the air you wouldn't see anything, unless maybe when the shadows get longer and before they get too long. Jordan wouldn't see anything if he did fly over it now. Besides, why should the kid have gone into that oven?"

Ellen turned away. Why should Ricky have gone that way? But why should he have taken a big canteen, unless he was going to cross a waterless area? If he had taken it, of course. But there were plenty of containers in the stores for scientific work.

Ricky had been interested in the Rift, certainly. He had been asking questions about it yesterday—one of the few times lately he had shown interest in anything at all.

But visibility in the Rift was bad now. When the shadows were longer—

Jordan called over the radio. He had been flying up and down the river and the adjacent forest for the last hour and a half. Ricky had been gone about four hours.

There were three hours of daylight left.

Two hours later the situation was unchanged. To the parties in the forest night would make little difference; they were using lights already. Jordan proposed to stay in the air—one or other of the moons would be in the sky most of the night. There was about one hour of daylight left.

Ellen Scott listened to his report, and those of the search parties. Then she went briskly to the place where the one remaining heliflier was parked. She found another member of the expedition contemplating it gloomily.

"Come away from there, Phil," she said severely.

"Oh, hell, Ellen, there's a seventy-five per cent chance the thing's all right. Woodman said he'd fixed up a rough plane, didn't he?" The man turned away nevertheless. "What in Space did Jordan want to bring that kid here for?"

Ten minutes later he shot out of his cabin, where he had been dispiritedly collecting together the makings of a drink, in time to see the heliflier rise gently into the air and disappear towards the west.

Although the shadows were beginning to lengthen the Rift was like a furnace. The water in the canteen was hot. Ricky and Big Sword sat in the slightly cooler earth on the north of a boulder and contemplated the forest lying away to the left—not the forest they knew, but the strange trees of the farther side.

Big Sword's goggle eyes did not

register emotion, but Ricky could feel the stir of curiosity in him. Big Sword was already reaching out to new streams, new treetops, new bare places that would be warm in the sun. For himself Ricky could only think about the two miles remaining to be walked.

He had hopelessly underestimated the time it would take him to pick his way through eight miles of boulders, too hot for the hand, walking on sliding shingle; he had managed less than two miles an hour. But now he had to get on. He stirred himself, got Big Sword perched again on his shoulder and re-strapped the canteen, lighter now but still a burden.

He had gone perhaps a dozen strides when the shadow of the heli-flier came up behind and settled over his head.

Ricky started to run. There was no sense to it, and Big Sword disliked the effects, but he ran just the same, with the water sloshing about on his back. The shadow of the flier slid forward a hundred yards and it began to come down over a comparatively level place. Ricky swerved sideways. He heard a shout echo among the boulders, but the echo of combined relief and exasperation in his mind rang louder.

"Ricky! Stop and talk! Whatever it is, I'll help. There's no sense in running. If I get in touch with your father, there'll be another flier and several people here in twenty minutes. Stop! Listen to me, will you, you—"

The shouts echoed on for a moment, but the thought had stopped.

Dr. Scott came whirling up through hot red mists to find herself lying beside a fire. A very hot fire, in a stone fireplace. It didn't make sense. Warm water was being sloshed across her face and there was a murmur of voices—two of them.

"She hit her head. That's all. She fainted. She'll come round in a minute. Then you'll hear her. It isn't sleep, no—not exactly. What's the matter? Why don't you—"

The second voice was no more than a vague murmur of curiosity; it was beginning to sound irritated as well.

Ellen remembered that she had been running among a lot of boulders and had twisted her foot. No doubt she had hit her head when she fell; certainly it ached. But what had she been doing that for?

She opened her eyes.

Ricky's anxious face hung directly above her and he was pouring water from his cupped hand on to her forehead. Beside him was—

Ellen winced and shut her eyes.

"Dr. Scott. Please!" Ricky sounded worried. "Are you hurt?"

"Delirious, I think," said Ellen faintly. She opened her eyes again. "Where did it go?"

Ricky's face was a study in doubt and other emotions. Ellen put a hand to the aching spot on the back of her head and began very cautiously to sit up.

"Come on, Ricky," she said firmly. "Who were you talking to?"

"Aloud?" said Ricky, in tones of surprise. "Oh, so that's why he couldn't hear."

Ellen shut her eyes again. "I'm the one with concussion, not you," she pointed out. "Who couldn't hear?"

"Well, his *name's* Big Sword," said Ricky doubtfully. "More or less, that is. He says he's coming back, anyway."

Ellen opened her eyes once more. They focused on the region of Ricky's right ear. Laid gently over it was a skinny black hand with four long, many-jointed fingers. A slender arm stole into view, attached to what might have been a medium-sized potato that had happened to grow black. On top of this was perched a head about the size of a large egg. The greater part of this was occupied by two large light-gray eyes with slit pupils and dully shining surfaces. They goggled at her solemnly.

Once again she was aware of a vague murmur of curiosity, not divisible into words.

Ellen drew a deep breath. "Ricky, this . . . this friend of yours. Why did you bring him here?"

Ricky studied her face earnestly. "It was my idea, not his, Dr. Scott. I wanted to get to the forest over there. To the other side of the Rift."

"But why?"

Ricky shook his head.

"It wasn't that at all. It was my idea, I tell you, not Big Sword's. He didn't . . . didn't hypnotize me. He wouldn't have done it to Barney ex-

cept that he couldn't think of any thing else to do. And I've absolutely got to get there now!"

Ellen sat up and stared at him. "All right, Ricky. Listen, you tell me the reason. If it's a good one . . . well, I must let your father know you're safe. But I won't tell him where you are. I'll fly you to the forest, and then back. How about that?"

Ricky breathed a sigh of relief. "Yes," he said. "Is Doc. J. very worried?"

"Worried? Listen, make it quick. I'm going to call him in ten minutes, whatever. What are you doing here?"

Ricky sighed and closed his eyes for a moment. "The idea began with the jellyfish, really," he said. "The male jellyfish in the lake."

The heliflier had completed the fifth sweep down the river to the Sea; back up the river to the rapids, where many rafts of floating vegetation broke up and re-formed, making Jordan's heart jump as he hovered above them; on up the river to the point he had fixed as farthest east. It was no good to fly over the forest; he had found that he could not pick up the search parties when he knew they were directly below him. The River was his only hope.

Nearly time to make another report. His hand was on the button of the radio when the speaker came suddenly to life.

"Calling all search parties. John Jordan please answer. Can you hear?"

Jordan's voice came out as a harsh croak. "I hear. Is he—"

"Ricky's safe. He's with me now. Turn everyone home. But—listen. He had a good reason for going off as he did. He had something to do and it's not finished. So I'm not going to tell you where we are."

"Sure I'm all right. We're going to remain all right. We'll be back some time next morning. Oh, and Ricky says"—her voice broke off for a moment—"Ricky says he is very sorry to have worried you, honestly he is, but it was urgent, and will you please not do anything to damage that Tree." There was a moment's si-



Jordan shouted something incoherent, but her voice overrode him.

"It's important, John. I don't know if it will come off, but he must have a chance to try. You can probably find out where we are, but—don't come. Do you understand?"

"Ellen, is he really all right? And are you?"

lence. "John? You haven't done something to it already?"

"I haven't, no."

"Don't let anyone touch it. Good night, John. Sleep well."

"Ellen—"

The speaker clicked and was silent.

The helifiers were designed for

sleeping in, in an emergency, but they were not air-conditioned. Ellen felt the compress on her head, which had long ceased to be cold, and envied bitterly Ricky's ability to sleep under these conditions. A faint gleam of light from button-sized surfaces a couple of yards off showed that Big Sword was still sitting and watching as he had been doing ever since they lay down. Ellen wished bitterly that she had had the sense to lie beside the refrigerator so that she could get more cold water without having to lift her aching head.

The gray buttons moved. She felt small, strong fingers tugging gently at the compress. She lifted the pressure of her head and felt it go. There was a sound of faint movement and the click of the refrigerator door, with a momentary blast of lovely cold air. A few minutes later the compress, beautifully cold now, was poked carefully back under her head. She felt the thistledown touch of skinny fingers against her cheek.

"Thank you," she murmured, and then, remembering, she repeated it inside her head, "Thank you, Big Sword."

They had flown at dawn and the heliflier sat among the boulders at the foot of the cliff. Ellen and Ricky sat beside it, shivering a little in the morning cold, and waited.

Ellen looked at Ricky's intent face. He could not hear strange members of the People distinctly, she had gathered, but he could usually detect their presence.

"What does it feel like?" she asked abruptly.

"Hearing thoughts?" Ricky considered. "It feels like thinking. You can't really tell other thoughts from your own—unless they've been specially directed. That's what made it all so very difficult."

"I see." Ellen sighed. What on Earth, or of it, could Ricky's future be? True telepaths would not fit in Earth's scheme of things.

"I used to pick up thoughts all the time," Ricky went on. "I didn't know that until I found out how to shut them off. It was a sort of fuzzy background to my thinking. Do you know, I think all real good thinkers must be people with no telepathy, or else they learn to shut it right off. Now I can do that I think much clearer."

"So you don't overhear thoughts accidentally now?" Ellen felt encouraged.

"No, I don't. I only get directed thoughts. I'm not going to overhear anyone ever again, it's just a nuisance."

"Stick to that. I don't think uncontrolled telepathy is much good to a human being."

"It isn't. I tell you what, I think there are two ways of evolving communication, telepathy and communication between senses, and people who are good at the one aren't good at the other. I'll never be a real good communicator like the People, my mind doesn't work the right way. But I'll be good enough to be useful for research. I'm going to—" Ricky

broke off, seized his companion's arm and pointed.

Ellen looked up at the cliff. It was about thirty feet high, here, with only a couple of six-inch ledges to break the sheer drop. Black foliage overhung it in places.

"There!" whispered Ricky. Slowly there came into view a black head the size of an egg—a black head in which eyes shone gray.

"Is he coming back?" whispered Ellen. "Has he given up, then?"

There was a faint rustling among the leaves. Ricky's grip tightened painfully on her arm.

A second black head appeared beside the first.

"You see," said Ricky anxiously, "I didn't really think you'd just go and destroy the Tree straight off, but I couldn't be sure. And everyone was angry with me about one thing or another and I didn't know if they'd listen."

"Speaking for myself," said Woodman, "there were one or two moments when if I'd had a blaster handy the Tree would have been done for there and then."

"So you were just taking out insurance," said Jordan.

"Yes, because if we found other Trees the species would continue anyway. Big Sword and I meant to ask you to help about that, later—the journey, I mean—only then I thought we'd better try that straight away in case I was stopped later. I thought if I could *show* people it was better than telling them."

"Isn't Big Sword coming?" said another of the party. The whole of the expedition, including even Barney, was seated around a square table raised on trestles in the center of the clearing. Ricky nodded.

"As soon as we're ready," he said. "Now, if you like. But he says if too many people think at him at once it may hurt, so he wants you to be ready to start talking if I give the signal."

"What about?" said Cartwright.

"Anything. Anything at all. Shall I call him?"

There was half a minute's expectant silence. Then lightly as a grasshopper Big Sword flew over Ellen's head and landed with a slight bounce in the center of the table.

There was a simultaneous forward movement of heads as everybody bent to look at him, and he sat up and goggled out of pale bulging eyes. Then—

Most of them felt the sharp protest of discomfort before Ricky waved his hand. Nobody had really thought out what to say and there was a moment of silence, then somebody began to talk about the weather, the statistician began on the multiplication table, Jordan found himself muttering, "'Twas brillig, and the slithy toves . . ."—after a minute or so only Ricky was still silent.

"He says he'll go to one person after another, but the rest keep talking," reported Ricky presently. "You can ask him to do things if you like."

Solemnly Big Sword went round the table, sitting for a few moments

in front of each person, snapping out his membranes, revolving to present his back view, and then going on.

"That's him!" said Barney as Big Sword came to a halt in front of him. "But how did he sting me?"

The spindly hand whipped to Big Sword's flat thigh and flashed back holding a flat gray spike two and a half inches long. He held it out and Barney fingered the point in a gingerly fashion.

"That's the sword, is it?" murmured Woodman. "Do they secrete it, Ricky?"

"I think so, but I haven't asked him."

Woodman breathed out a long sigh.

"This," he said, "is the answer to a biologist's prayer."

Big Sword bounced suddenly back into the middle of the table. "He's tired," said Ricky. "He says he'll send someone else another day." Ricky yawned uncontrollably as Big Sword took a flying leap off the table and hopped across the clearing. He had had a hard day the day before and a very early start this morning and a lot of excitement since.

"Can we just have the story straight?" said the statistician suddenly. "The biological story, I mean. You people may have been able to follow it through all the interruptions, but I didn't. I gathered that Ricky had discovered the female of the species, but that's all. How did they get lost?"

"I'll tell it," said Jordan, looking

at Ricky, who was nodding sleepily, "and Ricky can correct me. Big Sword's people are the active and intelligent offspring of an organism which to all intents and purposes is a large tree. They are produced by an asexual budding process inside pods. When they are a year or so old they are seized by the urge to migrate across the Rift. They never knew why, and probably none of them ever got across. It occurred to Ricky that alternation of generations usually turns out to have sex at the bottom of it. Big Sword's People couldn't reproduce themselves—they simply hatched from the Tree. So Ricky thought that there might be another Tree on the other side of the Rift which produced females. And when I very foolishly considered destroying the Tree because of Woodman's experience, he thought he had to go and find them straight off, so that at least the species would survive. And I'm glad to say he was quite right—they were there."

"You mean to say," said Cartwright, "that the Tree has been producing People for the last fifteen thousand years without a sexual generation at all?"

"Not necessarily," said Woodman. "There may have been several on this side of the Rift, at first and this Tree may be the last offspring of a small population. It must have been an outlier, if so, because the migration was so firmly set for the west."

"And there's another tree on the far side which produces females?"

"There are two female trees and

three that bear males, but two of the male ones are very old and have few offspring, and none of the seeds have been fertile for at least fifty generations. Apparently not many come to full maturity at the best of times, but this outcross may really save the species."

"And what exactly is the plan?" demanded the statistician. "To ferry them across? What will they do when we leave?"

"No," said Jordan. "We don't propose to interfere more than we have to. The tragedy of the whole process was that the People who took the Journey almost certainly died on the way. Twelve miles in the sun, with no water, was too much for them. We propose to provide a green belt—a black belt rather—along the migration route. Tiven is looking into the possibilities—"

Tiven looked up from his slide rule. "Easy as IT," he said cheerfully. "We can make the channel in a week, once we get the digger from First Base, and a cooker for concrete, and there are any number of streams which run down to the Waste and then vanish underground. It's just a question of training one of them in the way it should go, and protecting it from evaporation in the first year or two until the vegetation gets thick enough."

The conversation flowed on. But Ricky, his head resting on the table, was already asleep.

Jordan stood at the edge of the Rift and looked over the embryo

river-valley that Tiven had designed. Seedlings had been planted along the channel, in earth transported for that purpose, and were already taking hold. The revolving sun-cutters designed to protect them at this stage and to stop excessive evaporation gave the whole thing a mechanical air at present, but they would be done within a year or two; they were designed to go to dust then, so that even if the expedition had to leave they would not be left. There are places for stop poorly-built things!

Two of the People shot down the cliff a little to one side and disappeared into the shade along the channel.

"Are they off on the Journey?" said Ellen Scott.

"I don't think so. They go singly, as a rule. No, I think . . . look there!"

There were four People now at the end of the line of saplings. Two were presumably the ones who had passed a few minutes before; the other two were linked hand in hand and bore across their shoulders a kind of yoke with a long pod dangling from it. The two from the near side of the Forest had taken the hands of the newcomers and were helping them up the cliff.

"This is the result of your soil report, I think," said Jordan. "Woodman says that one reason for the lack of germination on the other side is the exhaustion of the few pockets of suitable soil. I wonder whether it was the necessity of finding the right soil, as well as of looking after the seed-

ling, that led them to develop intelligence?"

The two newcomers had reached the top of the cliff. They seemed hardly to notice the helpers, nor did the latter seem to expect it. The burdened couple moved slowly along, pausing every now and then to investigate the soil. They stopped close to Ellen's feet and prodded carefully.

"Not here, little sillies!" she murmured. "Farther in."

Jordan smiled. "They've got plenty of time. One couple planted their pod just under one of Branding's tripods; trying not to step on them drove him nearly crazy. He had to move the whole lot in the end. It takes them weeks sometimes to find a spot that suits them."

"Continuing the species," said Ellen thoughtfully. "I always thought it sounded rather impersonal."

Jordan nodded. "The sort of thing you can take or leave," he agreed. "I used to think that you could either explore space or you could . . . well, continue the species is as good a way of putting it as any. Not both."

"I used to think that, too."

"Once it was true. Things have changed, even in the last few years. More and more people are organizing their lives to spend the greater part of them away from Earth. Soon there's going to be a new generation whose home isn't on Earth at all. Children who haven't been to Terrestrial schools, or played in Terrestrial playrooms, or watched the Terrestrial stereos, or—"

"Suffered the benefits of an advanced civilization?"

"Exactly. How do you feel about it, Ellen? Or . . . that's a shirker's question. Ellen Scott, will you marry me?"

"So as to propagate the species?"

"Blast the species! Will you marry me?"

"What about Ricky?"

"Ricky," said Jordan, "has been careful to let me know that he thinks it would be a very suitable match."

"The devil he has! I thought—"

"No telepathy involved. If everyone else knows I love you, why shouldn't he? Ellen—did I say please, before? Ellen, please, will you marry me?"

There was a silence. Depression settled on Jordan. He had no right to feel so sure of himself. Ellen was ten years younger and had a career to think of. He had made a mess of one marriage already and had a half-grown son. He had taken friendliness for something else and jumped in with both feet much too soon. He had made a fool of himself—probably.

"Well?" he said at last.

Ellen looked up and grinned.

"I was just making sure. I'm not quite certain I could take being married to a telepath—which you are not, my dear. Absolutely not. Of course I'm going to."

Ricky, with Big Sword on his shoulder, was strolling along a path in the sun. He saw his father and Dr. Scott return to the camp arm in arm, and nodded with satisfaction.

About time, too. Now perhaps Doc. J. would stop mooning around and get on with his work for a change. He'd had Ricky and Woodman's last report on the biology of the People for two weeks without making the slightest attempt to read it, and it was full of interesting things.

Just for a moment, Ricky wondered what it was like to get all wrapped up in one individual like that. No doubt he'd find out in time. It would have to be somebody interested in real things, of course—not an Earth-bound person like poor Cora.

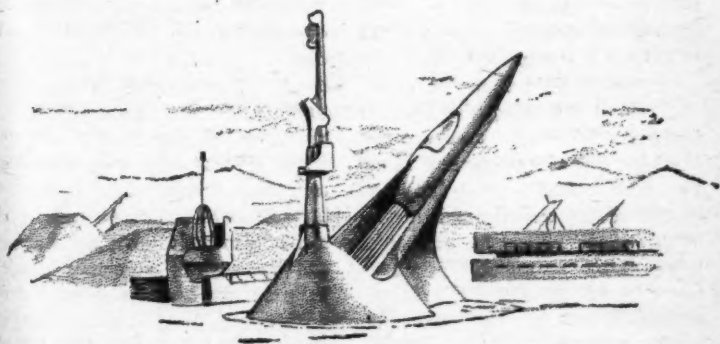
Meanwhile he was just fourteen and free of the Universe, and he was going to have fun.

Big Sword, from his perch on Ricky's shoulder, noticed the couple with the pod. He saw that this one was fertile, all right—the shoot was beginning to form inside it. One of

them was an old friend from this side of the Rift, but it was no good trying to talk to him—his mind would be shut. The whole process of taking the Journey, finding a mate and taking care of one's seedling was still a mystery to Big Sword in the sense that he could not imagine what it felt like. Just now he was not very interested. He had nearly a year in which to find out things, especially things about the Big People who, now they were domesticated, had turned out to be so useful, and he was going to enjoy that and not speculate about the Journey, and what it felt like to take it.

Because, eventually, the call would come to him, too, and he would set off up the new little stream to the other side of the Rift where the trees of the Strangers grew. And then he would know.

THE END



DIVINING ROD:

Standard Equipment

BY MURRAY F. YACO

This is a factual article. There is, to the best of my knowledge, no fictional content whatever. Mr. Murray Yaco is a professional technical reporter-writer. In my opinion, the routine operational application of not-now-known forces constitutes evidence of the existence of such forces that can not be dismissed by any legitimate, proper brush-off. It is not being done as a stunt, or for any purpose other than the direct use of information gained through its use. It is a useful engineering technique...and is completely unscientific, since it is not part of any body of organized knowledge. No theory as to how it works is proposed; the fact that it works is not open to argument, since a fact is not theoretical.



HAD BEEN holding the telephone to my ear for at least ten minutes, waiting for the long-distance operator to locate my party, when the operator finally cut back in to announce that Mr. Marklund was on the line. Marklund was indeed on the line, and shouted several questioning hellos into the phone before I was able to bring myself to respond. It wasn't easy, I found, to ask the distribution supervisor of the City of Flint, Michigan's Division of Water Supply—even in so many well chosen

words — if he were a water witch.

Marklund answered my faltering questions quickly, firmly. No, they did not use willow wands to locate breaks in water mains. That was all rumor and nonsense. The city's Division of Water Supply did, on occasion, use electronic listening equipment to locate water-line breaks; such equipment was commercially manufactured; it was owned and operated by numerous municipalities throughout the country.

"However," Marklund continued matter-of-factly, "you might be interested in some of our pipe locaters

ASTOUNDING SCIENCE FICTION



W. F. Marklund, Distribution Supervisor of the Division of Water Supply for the City of Flint, Michigan.

... something on the order of what you're asking about. When can you get up here?" We made arrangements to meet the following Monday morning at Marklund's office in Flint.

W. F. Marklund is six feet two inches tall, is ruggedly good looking

with prematurely graying hair, and is in his early forties. His manner is solemn and businesslike. We shook hands and I apologized for being an hour late. Marklund candidly apologized for forgetting about the appointment altogether.

"Let's go get a pair of rods," said Marklund. We walked out of the Division of Water Supply's attractive new building and into the parking lot. Marklund opened the trunk of a black Chevrolet which bore the insignia of the City of Flint on both of its doors.

"Here, take a look," Marklund said, thrusting two slender metal rods into my hands. I took the rods and held them as they had obviously been designed to be held, much like pistols without trigger guards or triggers. They were made of one eighth inch brass brazing rod, the "barrels" were about twenty-two inches in length, the handles or grips were eight inches long. Each handle was encased in a length of one quarter inch copper tubing.

"The tubing lets the rods swivel in your hands," Marklund explained. "Of course, it isn't necessary to use tubing on the handles; they'd work just as well without it if you held the rods loosely."

Marklund went on to explain that the pipe locaters, as they are called, were used by the water division to locate the position of underground lines. "When we're uncertain about location, or when our maps prove inaccurate, we can always depend on these. Want a demonstration?"

Marklund took the two rods, held them chest high, barrels pointed straight ahead. Slowly, he began walking across a stretch of bare ground in front of the Division's new building. Four paces later, the barrels began to swing away from

each other. They were in line with each other—the handles now back-to-back—before he had completed the fifth pace.

"Right here, parallel to rods and four feet underground, there's a water line. It's cast iron. Want to try it?"

I took the rods from Marklund, walked about thirty feet away, turned around, closed my eyes and began walking slowly toward him. "Take a look now."

I opened my eyes. The rods had swiveled as they had for Marklund and were now lined up at exactly the same spot Marklund had stood on a minute before.

Marklund took the rods again, and we walked back into his office and sat down.

"The city began using these about five or six years ago. I don't remember where it all started, but I think they're originally from the East. Our men carry them in their trucks as standard equipment. About eight out of ten of the men use them successfully. No, I don't have any idea why the other twenty per cent aren't able to produce results."

Asked if the city owned any electrical pipe-locating equipment, Marklund affirmed that they did. "But it has a rather limited usefulness. It only detects metal lines."

"And these?" I asked, pointing to the rods he had placed in the center of his steel desk. Marklund picked one of them up. He tapped the desk with it as he recited a list of materials

it could detect: "Lines of cast-iron water pipe, wrapped galvanized gas pipe, sewer crock, clay-tile drains, brick intakes and garden hose. It doesn't matter if the lines are empty or not."

"Garden hose?" I asked.

"Sure. Just lay some across your lawn in a line. Then walk toward it with a pair of these. They'll pick it up." Marklund reached up and scratched his head. "As a matter of fact, if you want to try it at home, you can use a pair of coat hangers. Just cut the wire, bend it into this shape and you're in business. Actually, it doesn't seem to make much difference what they're made of—although we've never tried anything but metal."

Marklund and his men are able to locate underground lines with considerable accuracy. When the rods have swung in line, it is pretty certain that the located water main or what-have-you will be found within a few inches fore or aft of the heels of the man holding the rods. From then on the direction is straight down.

"Incidentally," Marklund added, "the rods don't always swing away from each other and line up. Some persons find that they swing inward and line up parallel to each other. It just depends on the person. As you saw, they swing away from each other when I locate a line."

Asked for a typical problem-situation in which the rods play the leading role, Marklund tells of wasting an entire day trying to locate a brick intake at a Flint water plant.

"We used maps without any luck, and we even had a clam shell digging the whole place up. I didn't think the pipe locaters would work on brick, so when I finally tried them it was a last resort. They worked O.K., the first time. We found the brick intake on the spot—sixteen feet straight down."

Marklund has no pet theory about his pipe locaters' means of operation. "Sometimes," he says thoughtfully, "I have the feeling that it can't work—that I'm actually maneuvering the rods. After all, even though the handles swivel in tubing so that you can't rotate them, you could make the rods swing either way by tilting the handles up or down."

"But you don't tilt them."

"Not as far as I can tell. It takes quite a bit of tilting before you can make them swing like that. Then there's the acid test—they work."

Marklund knew of two other organizations in Michigan that used similar devices for similar work. In Midland, an employee of that city's water department uses the pipe locaters successfully. But as Marklund remembers it, the man uses only one locator, not a pair, and the barrel is considerably shorter than those on the ones he had demonstrated.

"This fellow tried it once on a water main that dead-ended out in the middle of a field. Funny thing, too. Even though he knew where the end of the line was, he kept getting a response—showing the direction of the line—even after he walked away out past the end of it."

The other user Marklund knew of was in Flint. It was Consumers Power Company, and the contact was a Dave Campbell. I thanked Marklund for his help, got in my car and drove to the address he had given me.

At Consumers Power Company, I was shown to Campbell's office, and then informed by his secretary that he was at a meeting. Would I like her to break in and ask if he would see me? I shrugged my shoulders. She left the room, returning seconds later with Campbell.

Campbell, tall, pink-cheeked and portly, was extremely affable and waved aside all apologies about the interruption. In a soft voice that still contained a trace of Scottish burr, he asked how he could be of help. I told him, and he began to look extremely unhappy.

"I'm not really the man to see, lad," Campbell said sadly, "it doesn't work for me. Time and time again I've tried those wishin' sticks, but I can't make 'em work."

At Consumers, "wishin' sticks" rather than pipe locaters, seemed to be the preferred name. Campbell went on to confirm that many of the company's trucks carried a pair of the sticks. However, it appeared that Consumers placed considerably more emphasis on electrical pipe-locating equipment.

"It's all a matter of faith," Campbell said wistfully. "I've tried it all right. They even blindfolded me,

thinkin' that would help, but it made no difference."

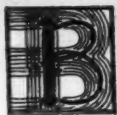
Campbell told about a company service man in their Lapeer, Michigan, district who has plenty of the requisite faith. According to Campbell, he uses the wishin' sticks exclusively, with consistently excellent results.

"I tried it and tried it and tried it," said Campbell, who was obviously becoming more despondent as the conversation wore on. He stood in the center of his office, suddenly thrusting out two red, balled fists holding imaginary wishin' sticks, "Once I stood beside a man, a man who could wish water, and watched as some hidden thing almost tore a willow stick from his grasp. I tried it then, over the same spot, and nothin' happened at all. You got to have faith, lad."

I thanked Campbell for his time, and made my way through the building's winding corridors. As I walked, I couldn't seem to rid my mind of the image of Campbell, standing poised, ready to take a first step with two imaginary pipe locaters. There was something disturbing about the pose, something that went beyond the man's frustration and plaintiveness. I remembered, too, that Marklund's demonstration with his set of pipe locaters had also evoked a feeling of unnaturalness.

Somehow, "wishing sticks" belong to an earlier—or a later—age. They don't fit, I guess, today!

THE END



IT NOTED that Astounding is not a news magazine; our publication procedures are anything but speedy.

Since we carry no fashion advertising, and no time-bound items, and our material generally is on the any-time-in-the-future basis. This report therefore is somewhat delayed reaching you . . .

As of six weeks after the editorial on the Society for Gentlemen Amateurs, the Interplanetary Exploration Society, appeared, there have been three hundred fifty-five subscriptions received.

That, I think, is a darned good showing . . . considering the actual nature of the offer made! "If you send us five dollars now, someday, if we get around to it, we will send you a journal, no samples of which are available for your inspection . . ."

Yes, indeed—it's a Society for *Speculative* thinkers!

Things are shaping up, however. One factor you may not have realized; the man whose mind has the characteristics of the speculative, creative experimentalist, the Natural Philosopher type, is not, by nature, a Joiner, a dyed-in-the-wool club-member type. They say Dan'l Boone felt real crowded when neighbors moved in only a dozen miles away; he was a pioneer and explorer, but not the Joiner type.

So the minds that make for the Natural Philosopher explorers and pioneers . . . do not have the characteristics that make for setting up organizations. The Gentleman Amateur scientist is, unfortunately, not a Gentleman Amateur organizer — of groups.

Let this be made clear; I'm not

CONCERNING THAT SOCIETY

either! This Society has been organized by men who *are* Gentlemen Amateur organizers, not Gentlemen Amateur scientists—and I suggest that all local clubs recognize the need for the services and aid of the organizer-type. The New York group was started by Mr. Fred Benham, a professional promotion man, whose hobby activity has, for years, been organizing clubs for other people; he likes building organizations as much as I like building electronic devices. Benham was the organizer of the Circus Saints and Sinners, and several other clubs.

Walter Gibson, Vice President of the American Magicians Guild, and Michael Todd, a New York attorney helped Benham start the organization.

The New York chapter is planning a first open meeting for mid-September, if we can get the thing rolling in time. Summer vacations interfere, and there are problems of contacting the men we need. But there are lists, now, of the subscribers to the *Journal* in the New York City area, whom we can send notices to. That hasn't been possible before, of course . . .

Work is being done—and remember
(Continued on page 150)

...AND

CHECK

THE

OIL...





DON'T KNOW who got me into it. Somebody mentioned my name to somebody else, I suppose, and then some third party agreed, so my name was sent to the FBI. Those worthy gentlemen stewed over my recorded past and my reputable present, and came up with a forecast on my probable future, all of which was duly forwarded to the persons interested. They chewed it all over, and I was nabbed for the job.

Of course, it wasn't quite as crude as that. They couldn't and didn't draft me; instead, they got Hoffstetter to do it. He was the perfect man for

... BY RANDALL GARRETT

If we could only get hold of a working interstellar spaceship, we would of course be out among the stars ourselves. They keep telling us...!



Illustrated by Schoenherr

...AND CHECK THE OIL

the job, too; he knows that the way to whet the scientific appetite is to give it a tidbit that it can't swallow until it's been chewed over for a long time.

He came strolling into my lab one day with a grin spread across his chubby face and said: "Hi, Doc. I asked at your office first, but the girl said you'd be in the lab. I should have known you'd never go in for paper work."

"Hi, Hoff," I said. "Still working for Uncle Sam'1?"

"Well, it feels like work, and I'm drawing a paycheck. What's cooking?"

He meant the question literally. He was pointing at the Wolff flask on the lab bench in front of me. There was a thermometer in one neck, a mercury-sealed electric stirrer in another, and a specially-designed fractionating column attached to the third. The whole thing was attached to a vacuum pump, and the stuff in the flask was boiling merrily.

I knew he wasn't really interested, so I just said: "A bunch of benzene derivatives, I hope. What's on your mind, Hoff?"

"I've got a job for you, Doc," Hoffstetter said casually.

I peered at the thermometer, checked the time, and put the figures on my data sheet. "Yeah? What kind of a job?"

His grin grew wider. "Now, what kind of a job would I be giving to the world's greatest chemist? Dishwashing?"

"I've done plenty of that," I told

him. "And knock off that 'world's greatest' bunk. I'm not, and you know it."

"You are as far as this job is concerned. Here." He reached in his pocket and pulled out a small box. He set it on the lab bench and flipped it open. It was padded inside like a jeweler's box, and a small sealed flask nestled itself comfortably in the padding. The flask wasn't any bigger than the first joint of my thumb. It was about three-quarters full of some straw-colored liquid.

I didn't pick it up. I just looked at it and then looked up at Hoffstetter. "So?"

"It's all yours," he said, "all one and a half milliliters of it. We want to know what it is."

This time, I picked the flask up. It was a trifle heavier than I'd expected it to be. The liquid inside was more viscous than water. In fact, the stuff looked and flowed like a good grade of light machine oil.

"Where'd you get it?" I asked.

"I can't tell you, Doc," Hoffstetter said.

That irritated me. "Well, is there anything you *can* tell me? This bottle's sealed. What happens if I break the seal? Does it oxidize on exposure to air, or evaporate, or what?"

"Oh, that. That was just to prevent leakage. No, it's fairly stable, I imagine. Odorless. Nonpoisonous, as far as I know, though I don't think anyone's tried to taste it. Oily. I don't know the boiling point."

I was holding the flask up to the light, and I noticed that the menis-

cus at the surface was convex. "And it doesn't wet glass," I said.

"Hell," said Hoffstetter, "it doesn't wet anything."

"Interesting," I admitted. "Is this the biggest sample you could get?"

Hoffstetter spread his hands. "It's all I have."

"Not much to work with," I told him, "but I'll see what I can do."

"Fair enough," he said. "Send the analysis and the bill to me, personally." He handed me a card. "And keep it under your hat."

"Fair enough," I said. "I'll let you know in a week or so."

It was a lot less than a week. Three days later, I got Hoffstetter on the phone. "Hoff, where the devil did you get that stuff?"

"Why?" he countered. "What's that got to do with it?"

"Because it doesn't act like anything I ever came across before."

"You mean you can't analyze it?" he asked. His voice sounded worried.

"I didn't say that. The first thing I did was get a spectroscope reading, so I can tell you to a T what elements are in the stuff. But the molecular weight is something fierce. It's way too high."

"What do you mean, 'too high'?"

"Well, the stuff ought to be a solid, not a nice, free-flowing liquid," I told him. "And it's a devil of a lot more stable than it ought to be, all things considered. Can you possibly get me any more of it?"

There was a silence at the other end for a moment. Then Hoffstetter

said: "Do you think you could analyze it if you had more time and more of the stuff?"

"Sure. Where can I get it?"

Hoffstetter had me with a gaff, and he knew it. I could almost see his grin coming across the phone wires. He made his proposition. I hemmed and hawed for all of five minutes before I took it.

It didn't take long for me to get a leave of absence from my own company. I just left it in the hands of my business partner, George Avery, and took off. The lab staff could handle almost anything that came along while I was gone. Hoffstetter and I caught a commercial airline stratocruiser out to the West Coast, and an Air Force jet bomber took us from there. I had no idea of where we were headed, except that it was an unidentified island somewhere in the South Pacific.

The plane rolled to a halt at the end of a long runway. A squad of Air Force men, each armed with a heavy pistol at his belt, came sprinting up to help us unload. I'd requisitioned some equipment I needed from the Air Force labs, and it was all neatly packed in crates in the belly of the ship. The Air Force men treated the crates as though they were babies, which I appreciated no little.

The first thing that caught my eyes as I stepped off the plane was the big metal dome that towered over every other building on the base, even the control tower. It looked

thick and squat, even so; it looked like a big, flat, black Easter egg sitting on its larger end. It was a hundred feet high and at least seventy-five feet through at its thickest part.

Don't ask me why I didn't recognize it for what it was. I should have, I suppose. I should have taken one look at it, and said to myself: "Well, what do you know? A spaceship!" but somehow I had always assumed that a spaceship would be a tall thin cigar of polished metal, not a fat, egg-looking, dead black thing like this.

I started to ask Hoffstetter what it was, but he shook his head before I could get my mouth open. "No questions, Doc. Answers first, questions afterward."

I knew Hoffstetter well enough to know that he wasn't just making meaningless noises, so I just kept my mouth shut and followed him to the jeep which was waiting for us a few yards from the plane. The sergeant at the wheel just barely waited until we'd sat down before he gunned the motor and took off towards the nearest of the buildings at the edge of the landing field.

I was beginning to get uncomfortable. The plane had been air-conditioned, but the landing field wasn't. The hot whiteness of the Pacific sun glared down from a pale blue sky and sparkled from the deeper blue of the ocean in the distance. I saw Hoffstetter peeling off his civilian jacket, so I did likewise. If he wasn't going to be formal, neither was I.

The jeep pulled up in front of a two-story wooden building that gleamed whitely with fresh paint. Hoffstetter and I climbed out, and I followed him in through the door.

It was a normal-looking military office. Men and women in uniform sat at desks in the big room or moved through it with quiet efficiency. There was only one jarring note. Every man and woman in the place had a sidearm strapped to their waist, and every one of them gave the impression that he or she was ready, willing, and able to use it.

Hoffstetter led me to the door marked COMMANDING GENERAL. There was an Air Force captain sitting at a desk piled high with papers. At his waist was the ubiquitous sidearm. He looked up as Hoffstetter and I came in.

"Hello, Hoffstetter. I see you got your man." He had a rather tired smile on his thin face. "Let's see the papers."

Hoffstetter pulled a sheaf of official papers out of his brief case and handed them over. The captain leafed through them, nodded, stood up, and saluted. Then he held out his hand.

"Welcome aboard, commander."

I took the hand, but I didn't return the salute. Navy men don't salute unless their head is covered.

"I still don't quite understand why I had to accept active duty for this job," I told him. "I thought I'd be in the United States Naval Reserve, Inactive, for the rest of my life. Why recall me to duty just so I can go on being a chemist?"

The captain frowned. "I think you'd better ask the general about that, sir. He's expecting you."

He punched a button on the intercom on his desk and said: "Commander Barton is here, sir."

"Send him in," said the gravelly bass voice of Lieutenant general Mawson. He didn't sound as though he'd changed a bit since I'd last seen him, eight years before.

He had changed some, though. I saw that as soon as we entered the office. His hair, which had been only gray at the temples, was almost solid gray now, and the lines in his face had deepened, making it look more like weathered brown granite than ever.

"Commander Peter Barton reporting for duty, sir," I said.

He snapped me a salute and waved towards a chair. "Glad to see you, sailor. Sit down." Then he looked at Hoffstetter. "It took you long enough to get him here."

Hoffstetter grinned. "I had to twist his arm, general."

"All right. Give me those papers and scram. You'll take the same plane back as soon as she's refueled. See if you can snare Galvez for us."

"I'll try," said Hoffstetter. He put his hand on my shoulder. "Be good, Doc. I'll see you." And he was gone.

"I don't suppose you brought a uniform," said General Mawson.

"I didn't have time, sir. Everybody was in such an all-fired hurry that I couldn't get everything straightened out at home, much less think of everything I'd need here."

Mawson made a gesture of dismissal. "That's all right. You won't need anything here except khakis, anyway. I did manage to get some insignia for you from one of the Navy boys, so you'll be all right." He opened a drawer of his desk and pulled out a handful of hardware—the Naval shield-and-anchors and the silver oak-leaves of a full commander.

"And I got a Navy hat for that big dome of yours—a seven and three-quarters, isn't it? Right. Go down to the QM and get some khakis, then go over to Ordnance and draw a sidearm and holster. Come back here at sixteen hundred, and don't go asking a lot of questions around here. That clear?"

I stood up. "Yes, sir. But I'd like to ask one question of you."

"Shoot," he said. "But I don't promise an answer."

"Why was it necessary for me to sign up for active duty? Doesn't the Air Force believe in hiring civilian chemists any more?"

The general's face hardened. "Not for this job. We want you under military discipline."

"Why, sir?"

"So we can court-martial you and shoot you if we have to."

I went over to the Quartermaster building to get a uniform. The shavetail in charge gave me three suits of khakis and everything to go with them except a hat. He didn't have the regulation Navy covers. He tried to palm some field boots off on

me, but I stuck with my guns and insisted on black oxfords. He gave in and then checked over his list of rooms in the Bachelor Officer's Quarters and assigned me a number and gave me the key.

Then I went over to Ordnance and picked up a sidearm, a holster, and two magazines of ammunition. I wanted to ask the Ordnance officer why it was necessary for everyone to carry a loaded pistol, but I decided that such questions just might be the kind that Mawson didn't want me to ask. And I didn't feel like breaking any regulations until I found out what was going on.

I headed for the BOQ to check in, dump my gear, and get into uniform. In the distance, I could see the towering black dome. I kept wondering what it was, but I decided not to ask any questions about the dome, either.

At sixteen hundred that afternoon, I was back in General Mawson's office. We didn't stay long. Mawson led me outside, and he headed across the compound toward the great black ovoid.

"I know you want to ask a lot of questions, Barton," General Mawson said, "but hold off a little until we can give you a connected story. It'll make things easier in the long run, and take less time. O.K.?"

"You're the general," I said. "You know more about the situation, than I do. But I warn you, I came here because of a promise; I wouldn't like to see you pull a fast one on me."

"What promise was that?" asked Mawson.

"That oily-looking liquid that Hoffstetter brought me a sample of," I told him. "I was promised that I'd get more of it to work on, and that I could have all the equipment I needed."

Mawson came out with his deep, rasping chuckle. "Don't worry, Barton. We have all sorts of fascinating things for you to work on. That's why you're here."

We went into another building, located almost at the base of the huge, looming, black egg. I could see that it was a newly constructed, temporary affair; the walls were covered with plastic sheeting, and the inside was unpainted. I followed Mawson upstairs, into a roomful of people.

There were twenty people in that room, sixteen men and four women, and every one of them was in uniform. Air Force, Army, Navy, Marines, even the Coast Guard was represented. But most of them were Air Force.

I knew several of them personally. Lidell, the biologist; Freisen, a physical chemist from Cal Tech; and Burkhalter, an M.D. specializing in neurology, were all friends of mine. I knew Oglethorpe, the physicist, and Bell, the biochemist, well enough to speak to, and most of the others I knew by reputation. Old Professor Brymer, one of the top astronomers in the world, was chuckling over the fact that he was the oldest boot shave-tail in the Air Force. He and several others had not had reserve commissions, so Uncle Sugar had just handed out a few gold bars.

One of the women was a good-looking brunette in her middle thirties; a sleek, svelte, efficient-looking female who looked as though she were a thoroughgoing career girl, as uninterested in men as an Easter Island statue, and as cold as Little America in August. That is, she seemed that way from a distance of a couple of yards. But when we were introduced, her hand squeezed mine, and her eyes looked straight into mine and crinkled up in the same expression that Lilith must have given Adam. With the smile on her lips and the light in those gray-green eyes, she had suddenly changed. Cold? Yeah, like an atomic oxyhydrogen torch.

I repeated her name because it hadn't quite registered. "Lieutenant Anthony? The name is familiar, but—"

She laughed. "Anthony is a pretty common name, Commander Barton, but I know what you mean. You're trying to place my name in some scientific field. Ever hear of S. Brownell Anthony?"

I snapped my fingers. "Sure! That is, the name rings a bell, but I still can't quite place it. Didn't you have a couple of articles in *Scientific American* a while back?"

"Five, to be exact." She could see I was racking my brains to place her, and the little devil was grinning at me!

"All right," I said, "I give up."

"The last one was '*Linguistics and Primitive Man*,'" she said.

"I'm crushed," I said. "I must admit my ignorance. I remember the



title now, but I didn't get around to reading it."

"That's all right," she told me, still grinning. "I didn't read your article on stable colloids, either, but at least I remembered your name."

"I've got the last laugh," I said. "I'm Peter Barton, not Edwin. No relation. I didn't write the colloid article."

She laughed again. "All right, we're even."

"Break it up," said General Mawson. "You two can play guessing games when you're off duty. We have a lecture to listen to right now."

There were chairs lined up in the room, in rows like those in a theater. At the front of the room was a broad, white projection screen, and at the rear a couple of enlisted men were standing behind a pair of projectors. One was for slides, the other for moving pictures. They both seemed to be loaded.

General Mawson stood in front of the screen with a long wooden pointer in his hands and said: "Ladies and gentlemen, give me your attention, please."

The room quieted down, and Mawson went on. "Some of you have already seen this, but it won't hurt to go over it again. Those of you who have just arrived may be a little surprised when you see what we have here; some of you may think we're pulling your legs. I assure you, we are not. Now, each of you has pencil and paper there on the chair. Please take notes on any questions you want to ask and save the questions

until after the lecture. There is no point in going over something twice if you can get it the first time, and some of your early questions may be answered later on in the talk. O.K.? Sergeant, douse those lights."

The lights went out, the slide projector came on, and we all sat back to see and hear the most sensational story since the Resurrection.

The radar operators thought it must be a balloon the first time it appeared on their scopes. It was coming down much too slowly to be any conventional aircraft, and when it got close enough to the island for the sound detectors to pick up any engine noise, there wasn't a whisper from it.

It was late evening, and the rainy season had come, covering the island in a visually impenetrable murk. When the thing was spotted on the radarscopes, dropping slowly toward the island, the searchlights had been turned on in an attempt to spot what everyone thought was one of the huge gasbags that are used for high-altitude weather observation.

Only when it broke through the overcast a hundred feet above the landing field had it become obvious that this thing was a long way from being a balloon.

If the ship had dropped in fast, the Air Force would have had it fired on by the ack-ack guns that bristled around the field. But who fires at weather balloons? And by the time the ship became visible in the withering glare of the bright search-

lights, it was too late to fire the ack-acks.

The bottom of the big egg settled itself gently on the broad concrete expanse of the airfield. It touched the surface and kept on going, crushing through the thick slab of concrete and settling into the coral rock beneath.

Then it stopped.

It was lucky that General Mawson had been there. Some officers would have gotten scared and ordered the guns to open fire; Mawson didn't. He figured that the worst thing that the object could be was a hydrogen bomb, and a bomb that big wasn't going to be a healthy target for heavy artillery. Besides, he'd had a hunch that it was something genuinely out of this world. Anything heavy enough to crunch its way through that landing strip shouldn't be floating through the air like a bubble full of helium. And Mawson knew enough to be fairly sure that neither Russia nor the United States had yet developed anything like a real, efficient antigravity device.

Mawson had held his fire and waited.

And nothing more had happened. The big black egg just sat there, doing nothing.

It sent out no radio waves, no signal of any kind, except the faint background noise of the infrared radiations of its own internal temperature. The only detectable vibration from the thing was picked up by sensitive equipment that the Navy used for submarine hunting. The

noise from inside the ship sounded for all the world like footsteps!

The President had been notified, so had the Pentagon. The ultimate decision was to watch and wait. By now, it had been fairly well decided that the thing was a spaceship of alien and unknown design. So the Air Force sat around and twiddled its thumbs, waiting for the enigmatic ovoid to do something.

General Mawson, following direct orders from the President, had put a ring of armed guards a hundred yards away from the base of the ship, which was surrounded by the broken rubble of the smashed landing field. No one was allowed inside that circle. Some of the Air Force technicians wanted to test the hull of the ship, take test shaving with a drill and find out what it was made of. Mawson's orders were strictly against anything that might be construed as a hostile act by the aliens—if there *were* any aliens. And Mawson had quite rightly assumed that any tinkering with the hull could properly be regarded as possibly inimical to anyone inside the ship.

"Suppose you landed a bomber in the Amazon jungle and the local natives came out and started working on the thing with a brace and bit?" he asked. The Air Force technicians simmered down and went on waiting.

General Mawson didn't go into the details of all the precautions that had been taken to safeguard both the spaceship and the people of Earth, but he inferred that everything that

could be done had been done at least twice. The Navy, armed with .22 rifles to atomic antiaircraft missiles, was prowling around the island in precisely spaced rings. Nobody knew what that thing might do, but they wanted to be prepared for everything conceivable. I found out later that some of the boys had pretty active imaginations when it came to dreaming up every conceivable thing that the alien ship could do.

A month passed.

Nothing happened.

A second month.

Still nothing.

On the morning of the seventy-first day, a door appeared in the side of the ship, and a man stepped out, his hands in the air.

Well, not exactly a man. The first slide that the general showed us was taken from a distance, and the figure did look amazingly human. The second slide was a close-up. One look at it, and you knew the being could never pass itself off as human without drastic surgery.

The eyes were large, round, and protruding—a bug-eyed monster, if you please. But the heavy brow ridges that covered the eyes jutted out well over the protruding eyeballs. From the brow ridges, the head itself sloped up and back, forming a ski-slope forehead. On the top of the round head was a growth that resembled purple moss. The mouth was well-formed, but it was much too wide. It went from one pair of wisdom teeth to the other.

In comparison, the nose was almost normal. It was a trifle longer than the average Caucasian nose, and very pointed, but not abnormally so.

"That," said General Mawson, "is Schnikelfritz." He stopped and eyed Miss S. Brownell Anthony. She just smiled, shook her head slowly, and murmured: "Not really."

"No, not really," agreed Mawson. "We have no idea what his name is. Or even if he has such a thing. So far, we haven't been able to get anything across to these people. So we've tagged them with names, so that our reports will make sense." He tapped the screen with a pointer. "You'll take notice that he carries some sort of sidearm. We don't know what it is or what it does. That's the reason that we all go armed; we hope that they don't know what ours will do. Don't use them unless you're attacked; then shoot to kill."

He paused and looked around. "Now, are there any questions?"

One of the men said: "What about the stuff they brought out of the ship and gave to us?"

"We'll get into that when we discuss the program as a whole, and the part that each man is to play."

I grinned to myself. Mawson had a way of making a research team sound like a group engaged in military tactics.

Dr. Oglethorpe, the physicist, rose ponderously to his feet, his grossly fat body looking ludicrously balloon-like in a khaki uniform. "General Mawson, am I to understand that each

of us is supposed to do his investigation separately from the others? Won't we be allowed to communicate our findings?"

"Quite the contrary," said Mawson. "We'll have copies made of all reports, so that they can be sent around to all the others. Every so often, we'll get together and have a bull session to clear the air and give each other ideas. Is that satisfactory, doctor?"

Oglethorpe lowered himself into his chair again. "Perfectly," he said. "That is how it should be."

"Thank you." Mawson looked us over for half a minute, then said: "We have a problem here, as you can see. What we want to know is: Why have these people come here? There are at least fifteen aliens on that ship, and they have been here for nearly four months without doing anything except give us a few odd-looking mechanisms that don't seem to do anything. (We'll get around to looking those over later). What we want to do is get into communication with them. For that reason, Lieutenant Anthony will have a class Double-A crash priority on all data. Otherwise, your work will be pretty much unrestricted."

One of the women, a Dr. Feathergill, who had been introduced as a bacteriologist, giggled. Mawson looked at her. "What's so funny, captain?"

She giggled again. "I was just thinking that, in all the movies, the alien steps out, raises one arm, and says: 'My name is Umgahwah,

Earthman; take me to your leader.'"

A laugh went through the room. Burkhalter, the neurologist, said: "Yeah, and they always managed somehow to learn our language by listening to our radio programs. I never did figure out how they'd manage to decode an alien language with absolutely no referents."

"You ought to know that, Burk," I said. "They have a neurophiltronic ultravabulator that correlates brain waves with the TV commercials."

"That's why they want to go to our leaders," someone else said: "they want to find out who writes those commercials."

We were all laughing our heads off, even Mawson. It wasn't that what we were saying was so funny, but the tenseness that had built up in us was coming loose. It wasn't until then that I realized that I had actually been frightened—the vague fear of the unknown.

It didn't take us long to discover that we had our work cut out for us. Schnikelfritz and his cohorts had brought out several pieces of apparatus from the ship. They had put the stuff on the ground near the circle of guards, and Mawson had asked for volunteers to go get it. It was from one of these gadgets that the mysterious liquid had come.

I looked the thing over. It was a tank, flat and long, like a twelve-volt car battery. The top slid off after a clamp at one end was released. Inside, there were plates and coils of metal, and queer-looking rods of

either glass or plastic—I couldn't tell which.

The tank was about half full of the liquid, which covered some of the doohickeys inside. Why had they given it to us? What good was it to us—or to them?

There were three of us in the lab looking at it. Freisen, one of the top men in physical chemistry; old Oglethorpe, the physicist; and myself.

Oglethorpe shifted his weight around until he could see better, and peered inside the box. "Know what that looks like? Condensers. D'you suppose that liquid is supposed to be a dielectric of some kind?"

"Could be," I said. "Want to check it Freisen?"

"We've got to start somewhere," he said. "I'll try it."

Me, I went back to work on the chemical composition of the stuff.

Ten days later, we were still baffled. As far as I could tell, the liquid was made up of molecules of high molecular weight, rings composed of ether links between several high-weight units. It might have been made by the dehydration of diols, but I didn't see how it could be done with such precision. Besides, the stuff didn't act right.

Freisen had tried to test the dielectric strength of the stuff and had come up with a mess. The stuff had gone to pieces on him and ended up as a hot batch of carbon and tar. The fumes had everybody coughing.

Oglethorpe pattered around in his lab and said almost nothing, but I could tell from his manner that the

puzzle was starting to wear him down.

After running through one eight-hour test that had given me nothing but negative information, I decided to knock off and go over to the Officers Club for a beer.

Outside, in the darkness, I could hear the dull beat of the Pacific against the coral reefs that outlined the island, and the soft whisper of the wind through the palms. It was almost like the South Sea Island of popular fantasy except that, instead of the traditional volcano with its lurid pillar of smoke, we had a fat black egg surrounded by the white glare of searchlights.

I went into the Officers Club, ordered a beer, and sat down at a table to brood. I didn't sit alone long.

"Hullo, commander; are you as sulky as you look?"

It was S. Brownell Anthony.

"Worse," I said. "Sit down and cheer me up. And knock off that 'commander' bit. Right now, I couldn't command a rowboat. If you're a good girl, you may call me Pete."

"I'm not a good girl," she said, with that hellfire twinkle in her eyes, "but I'll call you Pete anyway, just to show you I'm not prejudiced against Navy commanders."

As she pulled up a chair and put her own beer on the table, I said: "Fine. And what do I call you?"

"Brownie. From Brownell."

"Sounds pixieish enough for you. What does the S stand for?"

Those gray-green eyes focused on

me for ten full seconds before she answered. "I shouldn't tell you, but I will. It's Susan."

I got it then. Susan B. Anthony. The hell-raising suffragette of the late Nineteenth Century.

"Any relation?" I asked.

"None whatever. My mother thought it would make me independent or something."

"I'll never tell a soul," I promised.

"I, too, have a smudge on my otherwise pure name. I was dubbed 'Peter Ulysses' by my fond parents."

"That's tough, all right, but you can just use the middle initial, and no one asks questions. But if you use a first initial, everyone wants to know what you're hiding."

I shook my head. "I can't even do that. I have to initial reports. When I was an ensign, I was stationed in England for a while, and everybody got a laugh out of my putting *PUB* on all the reports."

"My heart goes out to you, Pete," she said. And we toasted each other silently with our beers.

"How's your old pal, Schnikelfritz?" I asked. I knew she had been working hard on cracking the alien language; she spent several hours every day, just inside the circle of guards, with a tape recorder and notebook, while Schnikelfritz and a few other aliens tried to help bridge the communications wall that stood between us.

Brownie swallowed the rest of her beer. "We're getting along," she said. "But the language is a hard nut to crack."

"I thought mathematics was supposed to be the universal language," I said. "You begin by agreeing that two and two is four and go on from there."

She looked as though she'd bitten into a green pomegranate. "Oh, sure. Easy. We've been through all that. We're all agreed that the square on the hypotenuse of a right triangle is equal to the sum of the square of the other two sides. How does that help? What's the mathematical equation for 'Hey, diddle, diddle, the cat and the fiddle; the cow jumped over the moon'?"

"I'd think it would help establish some sort of bridgehead; anyway," I reasoned.

"Oh, it does, it does. But it isn't as easy as most laymen seem to think. Look here; you're a chemist. You must have studied German?" She made it a half question.

"Three years of it," I said, "and I've kept my hand in since."

"You can read it: How about writing and speaking?"

I shrugged. "So-so."

"That's the way it usually works out," she said. "That is how far you've come—and you had a completely worked-out correlation between the two languages; you had a grammar and a vocabulary, and trained instructors who already knew the language. Of course; a trained linguist can do the job in a lot less time, but it's rough when you have to start out from scratch. So far, I haven't even been able to figure out the basic structure of the language; I

don't even know if they have verbs and nouns."

"Quit telling me what you don't know," I said, "and tell me what you *do* know."

"It'll cost you a beer."

"I'm a sucker for a pretty face," I told her honestly.

I got two more beers from the bar and brought them back.

"Now talk," I said.

"Well, it looks to me as though they don't have any linguists aboard. If they did, they'd be trying to learn our language as well as teaching us theirs. As a matter of fact, I don't think they have any trained scientists aboard—a few technicians, maybe, but no research men."

"What makes you think so?" I asked.

She frowned. "I'm not sure. Their

lack of information, mostly. For instance, the table of elements is universal. Any race, anywhere, that had discovered enough knowledge to build a ship like that would know the sequence of elements from hydrogen to uranium, and probably beyond."

"Granted," I said.

"Well, I got one of the boys to get me some samples of various elements—those that can be handled easily—and I tried to see if Schnickelfritz recognized them. He did. He knew copper, lead, gold, sulfur, red phosphorus, aluminum, zinc, and several others by sight. He even knew chlorine, bromine, and iodine."

"You're sure?"

"Reasonably sure. Anyway, I lined them up in the order of their atomic numbers, leaving blank spaces for the ones I didn't have. Then I scrambled the samples up and let



him have a try at it. He did about as well as you'd expect a high-school boy to do. But he got silicon, sulfur, and phosphorous in the wrong order, for one. And none of the others could do any better."

"There are two possible explanations for that," I said. "One: they have pretty good visual memories and were just imitating the way you put the samples in order. That might indicate that their idea of order is different from ours, though I doubt it. Or, two: they have a good layman's knowledge of science and no more."

"That's the way it looks to me," she said. "Now take a week off and try to figure out why people like that

would be aboard an interstellar spaceship."

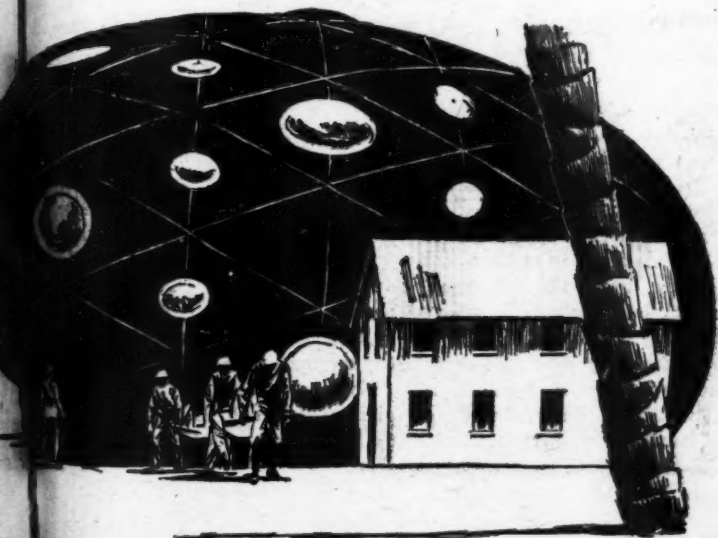
"Look," I said, "there's one kind of man they'd have to have aboard."

"What's that?"

"An astronomer. They have to navigate that thing, don't they? Why don't you get Professor Brymer to help you with the linguistics end of it?"

She nodded slowly, thinking it over. "Makes sense. I know he *has* been talking to one of them. Looks like we'll have to have that bull session we were promising ourselves."

We had our bull session, and, as Brownie had hoped, the correlation



of our various attacks on the problem cleared a lot of the air. Within the next month, we had four more sessions, and we began to feel we were getting somewhere.

Between Freisen and Oglethorpe's work on the tank, and my work on the fluid, we began to get part of an answer on the mystery liquid. It was a dielectric, all right, but only to certain frequencies that matched the oscillation of some of the molecular bonds in the molecules of the stuff. The tank was some sort of frequency regulator.

Brownie had reached the point where she could speak a sort of pidgin language to Schnikelfritz and his buddies, but she didn't seem satisfied. Over one of our beer-drinking sessions, which had become a fairly regular habit, she started grouching at one of General Mawson's orders.

"I still say that the only way we'll ever know what's going on inside their minds is to find out what's going on inside that *ovum negrum*."

"That's real pretty Latin," I told her. "But even your brand of Latin grammar isn't going to get you by those armed aliens."

"It isn't the aliens so much as it is your buddy, Brass Hat Mawson," she grumbled.

"Why? What's he done?"

"Well, I tried to get Schnikelfritz to let me in the ship. He didn't know what I wanted, so I started walking slowly towards the open air lock, with my hands in the air."

"Why raise your hands? Surrender?"

"Don't be funny," she snapped. Evidently she was in no mood for humor. "That's their equivalent of a handshake, and means about the same thing: 'Look; I'm not armed.'"

"So, what happened?"

"So the two guards at the air lock dropped their hands when I got too close," she said. "Two more steps, and they had their hands on those sidearms they wear. So I stopped, turned around, and went back." She shrugged. "It wouldn't have been so bad, except that Mawson saw the whole thing. And he gave me strict orders not to go inside that ship. Period."

"I don't blame him," I told her. "That could start something we might not be able to finish. What do you think you could find out if you did go in, anyway?"

Her eyes narrowed in thought. "I'm not sure. Our pal, Schnikelfritz has been trying to get something across to me, though. Something about an object they want or need. I can't quite get what it is, but I have a feeling that if he could show me around inside, I'd be able to dope it out."

"Look, Brownie," I said, "you stay away from that ship. This situation is touchy enough as it is without your pulling off something that'll blow the top off the whole mess."

She glared at me. "Now you're giving orders, huh? O.K. Thanks for the beer, Commander Barton, I'll let you know if I decide to violate those orders."

She got up and walked out with-

out any further chatter. I let her go; I wasn't going to chase her.

Then I thought of something and grinned. In spite of her protestations, she did have a touch of the original Susan B. Anthony in her make-up.

A week later, I was stewing around in the lab—almost literally stewing; I had four flasks boiling—when the phone rang. I walked over and picked it up.

"Chem lab, Commander Barton speaking."

"How come you're working this time of night?" It was Brownie. "I phoned the BOQ, and they said you weren't in, so I tried the lab. What's cooking?"

I told her what was cooking—literally, in words of sixteen syllables. She hadn't been civil to me all week, and I was feeling grumpy, so just out of pure deviltry, I gave her the Geneva names of the reactants in the flasks.

"Don't pull your technical jargon on me," she came back. "I'll bet you don't even know a fricative from a labial."

"Don't be vulgar," I said. "What's on your mind?"

"Remember when you told me not to pull off something that might set the place in an uproar? Well, I'm going to do just that. Better hurry." And she hung up.

I'd come to know that girl pretty well in the weeks we'd been on the island, and I knew she wasn't just whistling through her teeth. I knew my pots would boil untended, but I

gave the reflux condensers a quick check before I grabbed my hat and pistol belt and took off like a scalded cat.

It was later than I'd thought. I had been working so hard that I hadn't paid any attention to the time, and I was surprised to see that it was dark outside. My watch said eleven thirty. I headed for the alien ship.

I didn't quite make it in time; the silly wench had figured my speed pretty well. When I got there, she was already inside the ring of guards, walking towards the alien ship.

I sprinted up to the nearest guard and stopped. I knew that if I charged in there at a dead run, one of those gabozos would cut me down with whatever it was he carried at his hip. I didn't know what those things fired, but they looked deadly, and I didn't feel like stopping either poisoned darts or death rays.

"What's the matter, sir?" asked the guard. He'd snapped to attention and come to port arms.

"What's she doing in there?" I asked snappishly. I didn't wait for an answer; I yelled: "Brownie! You get back here! That's an order!"

She didn't pay one bit of attention; she just kept going.

The guard said: "Weren't we supposed to let her in, sir? Our orders are to let any of the research team in."

I ignored him. I stepped across the circle and started towards Brownie.

Evidently, the aliens had decided

on a definite distance from the ship—a warning distance at which they reached for their guns. As soon as Brownie reached a point thirty yards from the base of the big black ship, the alien guards put their hands on the butts of their weapons. Brownie stopped. So did I. They might think that two approachers were more dangerous than one. I was only ten yards inside the human guard ring, a good sixty yards from Brownie, but they might decide an attack was building up if I came closer now.

"Lieutenant Anthony!" I yelled. "Come back here!"

And then I heard General Mawson's voice behind me.

"Anthony! This is General Mawson! I'm ordering you to come back!"

I turned around and looked. Every airman on the perimeter of the circle was facing the ship now, their rifles at the ready.

Mawson said: "Just stay there, Barton, but don't move. I think—*awk! Brownie!*"

I spun around again—fast. My hand was already on my gun.

Mawson snapped. "Don't fire! Not even if they shoot her!"

But I couldn't have drawn my gun if I'd wanted to.

Brownie had already dropped her pistol belt to the ground. And now, very slowly, she was taking off her clothes!

Like a slow-motion strip tease, she was removing everything. There wasn't much to remove; she'd evidently come dressed for the occasion. The khaki blouse went, then the

skirt; then she kicked off her shoes. And that was it.

She stood there in the glare of the spotlights, her smoothly tanned skin reflecting the light as though it had been oiled. I realized that she was sweating, even in the cool sea breeze that came in from the Pacific.

Slowly, her hands raised above her head, she turned completely around. No one else on that whole airstrip moved. They hardly breathed.

One of the alien guards turned to the air lock and gobbled something. If there was an answer, I didn't hear it, but he turned around and faced Brownie again. His hand was still on the grip of his sidearm.

Brownie kept her hands in the air—

—And took a step forward.

And another.

And then she said something in that alien tongue.

And took a third step.

The not-quite-human hands dropped away from the gun butts, and Brownie kept walking.

When she reached the air lock, she walked on in as the guards stepped aside to let her pass.

And then she was gone.

For a long paralyzed second, none of us said anything. The scene looked just as it always had—the glare of the lights trying to penetrate the dead black of the hull, the ring of silent airmen, the enigmatic, quiet figures of the two alien guards, all as they had been for months.

Then the guard behind me whistled softly. "Well—that's one way to get

an invitation to come in. I wouldn't have turned her down, either!"

I turned savagely. "Shut up, fly-boy! That girl's got more guts in her toenails than you'll ever have in your whole body!" It was a vicious thing to say, and maybe not even true, But I was boiling.

The airman turned crimson and his jaw muscles tightened.

Mawson stepped up. "The commander didn't mean that, son," he said softly. "But you *did* make a mistake."

"Sorry, sir," said the airman stiffly.

"Do you think you'd be interested in one of their women?" Mawson asked.

"Well, I guess not; no, sir, I wouldn't."

"Well, they aren't interested in her, either. Right, commander?"

I had cooled off just as fast as I'd heated up. "Right. I'm sorry, Airman; I was just blowing off steam."

"But . . . why'd she do that?"

"It was the only way," I said, "that she could prove to them that she was completely unarmed."

"Oh," said the guard in a very small voice.

Then I thought of something, and my grin must have split my face as wide as one of those alien's faces.

"What's so funny, Barton?" Mawson asked, scowling.

"I just happened to remember," I said. "She told me that she was going to pull off something that would set the place in an uproar."

Even the airman snickered.

We waited. Mawson and I sat and smoked cigarettes furiously for hours, one right after another, until our mouths felt as though a Russian army had retreated across them. We drank hot coffee to take the taste away, and only succeeded in making them burn worse.

"It makes sense," Mawson said. "Sure it makes sense."

We were sitting well back from the perimeter of the guard line, watching the still-open air lock of the great ship. We'd grabbed a couple of chairs and a card table from one of the nearby barracks with the intent of having a game or two of gin to pass the time, but so far we'd done nothing but shuffle the cards, put them down, pick them up, and shuffle them again.

"What makes sense?" I asked, not really paying much attention. I was watching the pitiful khaki heap that lay on the shattered concrete thirty yards from the base of the spaceship.

"Remember when I was talking about a pilot having to land his ship in the Amazon jungle? And how he wouldn't want some native working on his hull with a brace-and-bit?"

"Yeah," I said. "Sure. I remember." I wrenched my eyes away from the lighted airstrip and picked up the cards.

"Well," Mawson went on, "if the natives were armed, would you let 'em inside the bomber?"

"No," I said. "No, I wouldn't." I laid out a hand of solitaire and started playing.

"But if you thought it would help you, you'd let an *unarmed* native inside, wouldn't you?"

"Yeah. Sure. Got another cigarette?" I noticed that I had laid a red six on a red seven. I picked it up and moved it to a black seven. Then I calmly played a red five on it. I played a red ace on a black deuce and then gave it up and shoved the cards into a heap.

"How long?" I asked.

"Who knows?" said Mawson. "As long as they let her stay."

"I mean, how long has she been in there?"

He looked at his watch. "Not quite two hours."

"I wish we had some bourbon and soda instead of this lousy coffee!" I was ready to chew nails—tenpenny, not finger.

"There's a bottle in my quarters," the general said. "Want to go get it?"

"No. Do you?"

"No."

We waited.

A little later, I said: "Suppose I went out there and stripped to the buff. Maybe I could get in, too."

"Or you might not," Mawson said. "They might decide there was something funny going on and shoot you both. Want to try it?"

"No."

"I didn't think so. And stop shuffling those cards!"

I quit shuffling and put the cards down on the table. Mawson picked them up and started shuffling.

We waited.

"It's almost dawn," Mawson said. It seemed years had passed.

"I know," I said. "I hope she comes out before dawn."

"Just because she has nothing on?" Mawson dismissed the idea with a gesture. "If she can go in that way with sixty-odd men watching her, she won't be embarrassed coming out."

"No, but—"

"General! Here she comes!"

It was the airman's voice. I jerked my head around to look at the ship. Brownie was standing in the air lock.

Mawson stood up. "All right, fly-boys! A-a-bout *face*!" His bellow echoed across the airfield. Reluctantly, the men turned their back to the spaceship.

"They had enough of a show last night," Mawson said.

But he didn't turn, and neither did I.

Because Brownie wasn't coming out alone. She walked briskly over to where her clothes were lying and put them on a lot faster than she'd taken them off. Beside her was one of the aliens — naked as a jay-bird.

"Tell the men they can turn around now, general," I said.

"Why?" Mawson asked.

"Because all they'll have to do is take one look at that character to realize that any slight suspicions they may harbor about Brownie's purity are utterly groundless. He's even less human than we thought."

"If it is a he," added Mawson, and bellowed out the order.

"I got some data, all right," Brownie said, "but I'm not sure what it means."

We were back in the briefing room, the whole team. Mawson was sitting down with the rest of us, letting Brownie have the stage, along with the starkly naked Schnikelfritz. I noticed that most of us managed to keep our eyes averted from the alien.

One thing had changed. None of us were wearing sidearms.

"In the first place, they're short of food and water," she went on. "Schniky, here, had to go through a lot of pantomime to get the idea across, and he had to show me his food and water supplies, but I finally realized that they're on short rations. We can replace their water, but I don't think they could eat our food." Then she grinned. "I know we couldn't eat theirs."

"Then why do they stay?" asked Oglethorpe. "Are they afraid we'll shoot them down if they try to leave?"

"I'm not sure. We can discuss that later," she said.

"Certainly, Miss Anthony. Go ahead."

"I did get one bit of information that might have a bearing on that, though," Brownie continued. "Schniky kept pointing to one particular gauge on a control panel of some kind. It didn't register anything. There was a switch under it, and he kept turning it on and off, and nothing happened."

"He showed me the other gauges.

...AND CHECK THE OIL



There's a little shadow in them that points at figures around a dial—just like our meters and stuff, in principle. But this particular one didn't show any shadow."

"I wish I'd get a look at that ship's insides," muttered Freisen, who was sitting next to me. "What does a linguist know about scientific equipment?"

"You want a punch in the teeth?" I whispered back. He shut up.

Brownie went on, giving a complete account of everything she'd seen, heard, done, and guessed about inside that ship.

"Now, here are my conclusions," she said. "See if you agree with me. If you don't, speak up, because these people are desperate."

Everybody nodded, so she went on. "I think that gauge was a fuel gauge. Something must have happened out there to destroy their fuel supply, and they just barely made it here. They thought our radar beams were the radio beacons that his people use to pinpoint a fuel dump." She looked over at me and Freisen. "That gadget they gave you, the tank with the queer liquid in it, seems to be some sort of communications device. It won't work without the liquid, and they need a replacement."

"So that's what that patch was!" said Freisen suddenly.

Everybody turned to look at him, and he looked at Dr. Oglethorpe. "Remember that patch in one corner of the tank? There was a leak, and they lost some of the liquid."

Oglethorpe nodded silently for a

second, then said aloud: "And I think you're right, Miss Anthony; they probably wanted more of the liquid; I doubt if the machine would work without it."

Brownie nodded back. "So all we have to do is replace that liquid, and we'll be able to get these people's communicator fixed. They can call home and get food."

"Can they wait another six months?" I asked.

"No." Her voice was flat.

"Then that's out. I'm not even sure I could synthesize the stuff in that time. There's a plasma-effect on those ring molecules that keeps 'em stable, and I don't know how it's done. I might never do it."

"That's that, then," she said. "Can we give them fuel?" Then, answering her own question: "Not unless we know what the fuel is."

"Can't you get the information from Schnikelfritz?" asked Mawson, looking at the alien, then looking away again.

Brownie shook her head. "All I can get out of him is a number. He keeps saying 'one,' every time I ask him about the fuel. Anybody who ever tells me again that mathematics is a universal language gets a boot in the snoot."

"I don't suppose he has any fuel left at all?" I asked. "Maybe we could analyze it."

She gave me a patronizing grin, and I felt foolish. Her opinion of my ability as an analytical chemist didn't seem very high at that moment.

"It's all gone," she said. "They

don't have a speck left. They're running the ship on emergency batteries."

"Even if we could get the fuel," Mawson said, "would it be smart to let them go? What if they come back with a war fleet?"

"The military mind," I said. "Why should they do that? To conquer us? They couldn't use Earth. They couldn't eat our plants or animals, and they'd have to sterilize the whole planet to make their own stuff grow. Besides, think of their supply line."

Mawson subsided.

Oglethorpe said: "What kind of fuel could drive a ship like that, anyway?"

And then it hit him. *One*. "Brownie!" he snapped. "Go get those samples of the elements you were showing him! I have a colossal hunch!"

It turned out that Oglethorpe was right. The big, black egg-shaped ship was fueled by the same reaction that fuels suns. Hydrogen. Element number one.

How they did it, I don't know, but the "fuel tank" of that ship held tons of the stuff without either cooling it off or putting it under pressure. My guess was that it was something akin to adsorption on the surface of some tremendously receptive sponge, but I'm still not sure.

The gas is fed from the "fuel tank" into a reactor that turns it into—not helium, but pure, raw energy. Fine sort of gadget, but I'd hate to have it run wild.

While all those tons of hydrogen were being pumped into the fuel reservoir of the ship, the President was sitting with the Cabinet, trying to decide whether to let the aliens go or not. It was a tough problem. Ethically, we had no right to imprison intelligent beings against their will without due process of law. On the other hand—

I let the rest of them worry about that. I went back to the lab. Two days after the hydrogen pumping had begun, Brownie came into the lab, a frown on her face.

"Pete—is there any chance you can synthesize that stuff very soon?"

I'd been asked that question once too often; I was beginning to feel like an absolute idiot.

"Look, Brownie, this is a complex organic chemical. It isn't table salt or granite. Did you ever hear of synthetic hemoglobin? No. And the boys are still trying to synthesize insulin. Analysis is one thing; synthesis is another."

"Don't be sore, Pete. I'm worried—really worried."

"Worried? What about? Afraid our alien friends might decide to invade us?"

"No. But Schniky says that the tanklike gadget they gave us is vitally necessary for the operation of the ship." Her eyes had a worried-looking expression.

"I thought you said it was part of a communication device."

She shook her head. "I goofed. The word translates as *transmitter*; it transmits energy from one place to

another inside the ship. He wants it back."

"He can have it back. The tank, that is. I'm keeping the liquid. There's not much of it left, and I am *not* going to let it out of my hands."

The phone rang. I picked it up and identified myself. It was Mawson. "Is Brownie there?"

"I handed her the phone. She said 'Hello,' then listened for a minute. When she hung up, she said: 'Two stop orders have just come through on the refueling job. One from the President of the United States, the other from Schnikelfritz.'"

Of the entire group that worked on that ship, the most successful, without a doubt, was Miss S. Brownell Anthony. I told her so, six months later.

We were still on the island; we still had to solve the puzzle of that ship. We sat in the Officers Club over beer and toasted to Schnikelfritz.

"He tried," Brownie said, "but he was confused."

"At least you know the language," I said. "If we ever contact his kind again, we'll be able to talk to them."

"Other than that," she said, "we all goofed."

"You didn't," I corrected her. "Oglethorpe did, by making a hasty guess. But how was he to know that Schniky wanted tritium—super-heavy hydrogen—instead of the ordinary stuff?"

"Funny," she said. "Funny, queer; not funny, ha-ha. Funny that they

got themselves into a scrape like this. Just a simple little joyride through space. A rich man's yachting party. They developed a little leak in the energy transmitter, and the fluid leaked out. That meant their tritium fuel was wasted—tossed out in space. They picked up our radar beams and thought we were a—" She paused.

"Go on," I said, "say it."

"—A filling station."

"Yeah. And now they're all dead of starvation just because we were too backwards to understand what they wanted when they came."

She looked into the golden, bubbling depths of her beer. "Mawson wants to keep us here as long as he can. So does the President. But what good is a linguist when there's no one left alive to learn from? You don't need a linguist to study a spaceship."

I was humming to myself, and I caught myself trying to remember the words. The memory was elusive.

She sipped at her beer. "The general said yesterday that I could probably go home. The President will take his recommendation, and Mawson says I'm not needed here."

"It's odd that there were no books aboard," I said, out of a clear blue sky.

"I looked the whole ship over," she said. "I didn't find anything even remotely resembling a book."

I hummed a little more of the tune. "I guess they did it the hard way."

She looked up at me with those gray-green eyes. "The hard way?"

"Sure. That little gadget Oglethorpe and his boys are working on. It's like recorded television, except that the screen shows the print instead of moving pictures. Or maybe it was just the particular tape that they were testing."

Her eyes took on that hellcat expression. I liked it. "You louse," she said softly. "You're just doing that to tease me."

"I'm not. Scout's Honor. There really is a gadget. It looks like a complete recorded library. As a matter of fact, there's one of them in each room of the ship. It looks as though the rich Mr. Schnikelfritz

liked to provide for his friends' entertainment."

"A whole library." She said it very slowly. "Pete, you've been saving this up. You knew I wouldn't want to leave after hearing about that."

"I knew it," I said. "I didn't want to be alone on a desert island."

Then she looked at me and grinned. "That's a very pretty tune you're humming. I think I'll stay for a while just on account of that."

Then I remembered the words:

I knew what I liked,
And I liked what I saw,
And I said to myself:
That's for me!

THE END

THE ANALYTICAL LABORATORY

Most of the mail that came in on the July issue was concerned with the editorial—the discussion of the Society for Gentlemen Amateurs, the Interplanetary Exploration Society. We got less discussion of stories than usual!

Readers . . . remember that your votes are of the greatest interest to our authors. It's your 35¢ laid down on the newsstand that pays for the magazine. And your votes determine which authors get the bonus payments for extra-quality performance.

This time, the July issue was rated as follows:

PLACE	STORY	AUTHOR	POINTS
1.	The Miracle Workers	Jack Vance	1.66
2.	Close To Critical (Pt. III)	Hal Clement	2.46
3.	Business as Usual, During Alterations	Ralph Williams	2.51
4.	Top Rung	Christopher Anvil	3.29

THE EDITOR.

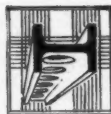
FALSE IMAGE

BY JAY WILLIAMS



Necessarily, any intelligent being—human or alien—bases his actions on what he believes to be true. No one can know what is true. And a false image of reality can yield tragi-comic results....

Illustrated by
by Freas



AKON was just climbing into his ground glider when the Inspector appeared, a tiny dark spot in the sky. With an inward sigh, Hakon wriggled out of the hatch and stood waiting. The first delicate touch of the other's mind reached him, questioning, then amused: the Inspector had caught that sigh.

In moments, he dropped down. The wings of the flier folded back and the machine stood quietly as the

ASTOUNDING SCIENCE FICTION

Inspector climbed out of its head. It looked something like a pelican, only of an outrageous lavender color. Like all the machines of the People, it was made to resemble a creature of their own world—it was not only part of their artistry, of that impulse to find beauty in the meanest objects, but part of their sense of the humor in all things as well.

Hakon and the Inspector exchanged greetings. They used no words, only their minds met and registered gratification at meeting. Their conversation was an incredibly rapid series of symbols, of imaginative pictures or concepts, with here and there a word or two when it might be needed for explicitness, or perhaps for sheer amusement—for although the People were telepathic they had a written language, and they still made puns.

—I'm sorry to break in on you, said the Inspector. It always happens that way, doesn't it?

—It's what we used to call Fate. Like looking for a reference in a pile of books, and finding it always in the very last one of the pile. I might have known you'd come just as I was planning to leave, said Hakon.

—I won't be long. I have to visit Rush's farm, too. How are the crops?

They both turned to look at the gray-green fields. Acre upon acre, the *luagh* stretched over the rolling hills towards the forest in the distance, their thick fleshy leaves writhing sensuously under the hot sun which they clearly enjoyed. Into the minds

of both men came their emanations: a kind of steady, simple humming, senseless but happy, like the drone of a hive of bees.

—No complaints. I'll need some more spray; there's a kind of glossy green beetle that's begun to attack them. Not too serious. . . .

—Beetle-battle?

—Quote: The singing rocks, the searing spray. Dolman, the Water Poet.

They laughed together. Then the Inspector said,

—When do you plan to begin combining?

—Rush and Teller and I can use the same combine. In about three weeks.

—Any trouble with the natives?

—No. I've seen three or four. . . . I think they've established a colony in the forest near those barrows.

He made a picture in his mind of a glade in the forest where three or four large mounds of earth covered the ruins of what had once been buildings. Both men thought together of the natives, the hairy giants with their crude weapons, running lithely forward. They had killed Derk, a farmer in another sector, smashing himself and his ground glider to a pulp under their stone hammers, and vanishing into the forests again.

Hakon could not suppress a shudder.

—I'm sorry for them, he said. But they fill me with such revulsion.

—I know. One or two members of the Council have even talked of

punishing them, perhaps of killing one as an example. . . .

Hakon's thought broke in: —What? Never that. Why, it would reduce us to the level of beasts!

—Of course. It was overruled. It's too bad . . . if we could only make contact with them. But their poor minds have no capacity for thought - transference, and their speech is so crude, what little we've heard of it, that many people think it has no words. In any case, our own voices are too high-pitched for their ears; they don't seem to hear us.

—Do you think they reason? Hakon mused. Or is it mere instinct that moves them?

—I don't know. Most of the best of our biologists incline towards instinct.

Hakon's eyes were on the distant forest.

—If we could only capture a few of them.

—Yes. But they're too skillful at woodsmanship for us. And the few we've taken have killed themselves before we could try to reach them.

—They are almost like men, said Hakon wistfully. Only they are so huge, so coarse, so furry. They are too big, he finished sadly.

—In any case, Hakon, you're not afraid?

—No. I keep my paralyzer handy. I'm not afraid anyway.

—Good. Well, give me your requirements, and I'll be off.

It was a matter of a second or two for Hakon to give the figures on type and quantity of spray, as well as his

needs in food, fuel, some new books and plays, and *draga*, a mildly hypnotic drug taken for relaxation. The Inspector got into his flier, and his last thought came as the machine flipped open its wings and shot skyward: —Six weeks more and you can go back to your wives again; happy henpecking! Then he was gone.

Hakon returned to his ground glider and squeezed through the hatch once more. He snapped it behind him and settled into the padded seat which held the lower part of his body firmly and comfortably in place. In this position, he could move his arms easily and could see through the round ports on either side of him. He pushed the starting lever and almost noiselessly the machine began to move, its hundreds of spherical bearings rotating beneath it. Below Hakon were fuel chambers, storage chambers, and tools neatly racked, and because the machine adjusted to the slightest change in the contours of the earth, he felt no jars or jolts but rode smoothly and easily in the control chamber above.

He passed the edge of the first field, and the *luagh* all turned towards him. They had no minds, but the millions of tiny sense buds on the leaves knew the vibrations of his motors, imperceptible as these were to the ear. In his imagination, the *luagh* were transformed into steaming recipes—or into cold slices eaten with rhiam sauce—the root, ground and powdered, had medicinal uses

also, and in fact, every part of the plant was good and useful and valuable. It was one of the basic crops of the People. They had found and used other plants on this very planet, but none satisfied their requirements so thoroughly as the *luagh*, which they had brought with them from Home.

Hakon turned northward, past the tiny post which winked a signal for half a mile and which, if any large beast tried to plunder the crop, would activate the warning light both at the farm and in the ground glider, giving instantly the location of the trouble. Once or twice, enormous beasts grotesquely crowned with wide-spreading, heavy antlers, had come to eat the plants. Hakon had driven them off easily with mild electrical charges. Now and then, in some cases—though so far, not to Hakon's farm—the natives would come. They did not eat the *luagh* but seemed to have a brainless desire to destroy them, or perhaps they took pleasure in tormenting the People in any way that they could; in such instances the mere appearance of a ground glider was generally enough to send them running for cover, and they could run very fast, faster than a glider. "Generally enough"—but not enough in one case, at least. Poor Derk. . . .

He shook off the thought and glanced at his gauges, and then at the network of fine, luminous lines that was his map. He looked through the ports at row after row of plants, a geometric scoring across the earth,

gray-green and swaying gently to the touch of the sun. At Home, the sun was dim and dying, the sky darker than this, but the earth was much the same. The People were dispersing throughout the immensity of space, some never to find land, others like the fortunate colonists of whom Hakon was one, to find a new earth, to plant the *luagh* again, to make farms and the little towns the People favored, to pick up once more the arts of life: dancing, painting, weaving, mind-music, the making of artifacts, and love, all those things which made being alive so delightful and so precious.

He was approaching the northern boundary, that closest to the forest. The ground dipped down into a gully where a lively stream purred and winked among gray boulders. Beyond it, there lay a patch of green marsh where rushes waved, and then the tall, thick, dark trees. Hakon slowed the ground glider. He was about to swing eastward when he saw movement below him.

It was a native. Easily three times Hakon's height, he stood knee-deep in the stream. A large, shaggy, four-legged beast, one of those predators that sometimes crept howling about the farms towards the end of the harvest season and stole scraps of *luagh* after they had been cut and baled, was leaping up on him. The native fended the creature off with a stick, struck at it, then gave ground. Water splashed up about both the combatants.

Hakon gripped the steering lever

hard, but he could not move, not so much as to turn his head away from the port. Higher leaped the beast, and the native, dodging and ducking, waved the stick. His mouth, full of long white teeth, was open, and Hakon suddenly heard him bellow, a wild, heart-shaking cry.

He looked so much like a human being—that was it. In spite of his hairiness, in spite of his bestial teeth and his coarse, pallid skin, he was shaped not unlike one of the People. He might be torn and mauled by the beast, his blood washing out in the stream, his life gone—that life that was so dear, even to these primitive creatures.

Abruptly, Hakon made up his mind. He drove forward and down the slope. Neither of the fighters had noticed the approach of his silent machine. He was very close to them, when he set the aiming device of his paralyzer upon the beast, and tapped the stud.

The dart sped unerringly to its target. The beast gave one convulsive leap which carried it to the bank of the stream, and then stiffened and fell, half in the water. With its last strength it dragged itself up a little way on land, and then lay still, only twitching a trifle.

The native stood as if himself paralyzed. Then, turning his head from side to side, he looked up and saw Hakon's glider.

For an instant, Hakon was confused. He had not quite known what to expect as a result of his interfer-

ence, for he was accustomed to the touching of minds and involuntarily had looked for the quick glow of thanks. In any case, he had come too close, and now, although he tried to swing his machine aside, he was not quick enough. For the native, unpredictable like all his kind—or, it may be, acting only upon some triggered instinct, and not reason at all—rushed up the bank at him.

The native was fully as tall as the top of the glider. He seized it in both his hands, just under the ports. There was a loud snap as the sending antenna broke. Under the great weight of the native's muscles, the machine toppled.

Hakon was not hurt, but his world was insanely upside-down. He lay on his side, pressed tight against his padding. One of the ports was dark; through the other, he could see part of a cheek and neck, the shaggy bristle of hair, the large pores, the blotched, pale-brownish skin. He fumbled with the levers, racing his power in the hope of forcing the machine out of the other's grasp. It was useless.

There was a clang that reverberated through the glider. Inching himself up a trifle, Hakon could see the native's arm rise and fall. Again came the clang.

He understood, then, that his enemy was holding down the glider with one hand and hammering at it with the stick, to smash it as Derk's machine had been smashed.

He turned to the paralyzer. If the native's body were by some chance

over the firing port, he could send a dart into him. The steady clanging made his head spin. He pressed down the stud. There were two clicks as darts sped out, and then the red light blinked. That meant the last dart had been expended. But the clanging went on; evidently, he had done no damage.

There were more darts below, in the belly of the glider. He unclasped the padded side of his seat and with some difficulty stretched out a leg, feeling for the step. He touched bent and twisted metal. At the same time, he felt the whole machine shake to an even stronger blow, as if the native had exchanged his stick for something heavier.

He crawled back up. He was very calm, terribly calm. He looked into the face of death and sighed, for although he did not fear it, he loathed leaving a world so full of potential happiness. The faces of his wives swam into his mind's eye, smiling and affectionate, but he banished them for it was too painful.

There was one more chance, but it was one he was reluctant to take for it meant touching the native. If he could break the glass of the upper port and reach out his arm far enough to get hold of, say, one of those lank greasy locks of hair, with such a physical contact he might focus all the power of his mind into one single bolt that would stun the enemy. It was a thing that had once or twice been done by some of the People, in danger. It took enormous energy, enormous concentration, and

it required absolutely a physical meeting of bodies as if the energy of the mind needed a channel of flesh along which to pass.

It was worth trying. The alternative was to lie still, resigned like an old man, waiting for death. And Hakon was in the prime of life.

He snapped open the small tool compartment at his right side. There was a case of wrenches there. Somehow, he got one of them out although the machine was now shaking and rattling like a living thing. Turning his face aside, he struck the glass. It broke free, leaving only one or two jagged pieces in the circular frame. He dashed these out with the wrench, then dropped the tool and twisting his body pushed out his arm as far as he could.

His groping fingers closed on hair, rough and wet and harsh. He shuddered. Then, shutting his eyes he took a deep breath, summoned up all his powers and relaxed his mind, focusing it upon the image of the native.

He became aware, distantly and vaguely, of a great turmoil. Anger and fear swept into his mind, and a horror stronger than anything he had ever experienced before. But it was not a horror for the manlike creature outside; on the contrary, it was aimed inward, at himself.

Then suddenly the flailing and banging stopped. There was silence.

Into his brain came a blind, aimless question: *Who? Who?*

A great thrill swept over him, a

spasm of excitement almost like that of love. He was touching the mind of the native!

Again, the questioning searched him, not in words, but a gigantic interrogation. And then the thought: *Alive? A reasoning being, like Myself?*

He formed the emotion of friendship, a sense of identity and of peace, trying to keep himself receptive. After a long moment, he was conscious of a similar fumbling thought that reached him. And along with it, the question, stronger this time: *Who? What are you?*

He thought his name: Hakon. A farmer.

A name, strange and yet oddly similar in sound to one of the names he knew, shaped in his head. *Jon.*

He thought again: Peace, calm, friendship.

Slowly and tentatively at first, with many blank pauses, with images that grew clearer and clearer with practice, then with hurrying symbols that could be framed in the fraction of a second, with large and nearly abstract emotions and wellings of sensation like waves of color, they communicated. There were words that meant nothing, words that overlapped images, questions and answers that needed no words but rested upon feelings common to both.

—I am a man.

—I also am a man.

—But you are not like us.

—No one is exactly like anyone else.

Images of great towering cities,

then of buildings shaking down, of rosy clouds and flames and ruins smoking, and people running.

—This is my world. It was once great. We keep the legends and stories alive.

—How did they die?

—It was a war, a terrible war of destruction.

—My people do not kill.

—Neither do mine . . . now. Not each other. We are content with what we have.

—But you kill us.

—We kill only the beasts, for food or protection.

—Protection? Why did you turn on me when I saved you from the beast that attacked you?

—What? Attacked me?

And with that, Hakon became aware of a great, gusty surge of amusement from the other, of humor to match his own sense of humor. At the same time he heard that wild crying noise, and it came to him that it was laughter, on a different note from the laughter of his own People but laughter nevertheless.

—Attacking me? said the native.

—It was my *dog*. We were playing.

—*Dog?*

—A pet. A friend, although a lesser creature. He was jumping at my stick, in a game.

Then, with a shade of hostility: —And you killed him.

—No, of course not. He is only temporarily asleep. He will be as well as ever in a little while.

There was a surge of relief, mixed with the sense of wonder: —And

you tried to save my life? Of course, how could you know . . . ?

Hakon himself could not help laughing. He felt, too, the native's own sense of astonishment at his amusement. Then came the question, full of pleasure: —So you have a sense of humor, too?

—Certainly. A *dog* you call the beast? It is like what we call a *nakko*.

He made the image of a *nakko*, frisking on its many short legs, grinning all over its happy face, gamboling at the feet of farmers as they walked through the *luagh* fields.

At the same time, he felt the other's mind withdraw.

—What's the matter? he asked.

—That. You have taken our earth away and filled it with *those*.

—We have taken nothing. Is there no room in these huge fields for both of us?

—But those things. Great bunches of worms as high as my knee.

—Worms? They are plants. We call them *luagh*.

—Worms!

Hakon saw them suddenly, as the native saw them: living, writhing animals, but larger than they should be, unbearably soft, slimy, blind, with an overtone of something nasty.

He thought mildly: —They are only plants. They are like these others, the trees about you, the flowers, the grass. They have chlorophyll in their veins. There is nothing nasty about them, nothing more than root and leaf.

—Maybe not . . . but it is how we think of them.

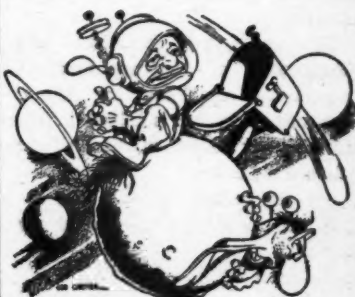
Hakon waited for a moment. Then he said: —Is that why you hate us so?

In reply, there swept into his mind a sensation of unutterable hatred, so violent that it shook him. In an instant, it ebbed away.

—It is very ancient, very deep-rooted with us, the native said.

And Hakon saw the image the other saw, something huge, scaly and poisonous, with a flat, deadly head and staring eyes, the upper part of the body reared up as if to strike. With the image came the word, *snake*.

—That is why we hate you, said



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the native. To be hunted by such things, to see them gliding evilly over our meadows among great clumps of worms . . . do you wonder at us? Do you wonder some of us would rather die than fall into your hands?

—But it is my ground glider, said Hakon, full of astonishment. —It is made in the image of a gentle domestic animal on my own world, the *okalasir*. It is our joke, that the animals we use to help herdsmen should be the machines we use to "herd" the *luagh* plants.

—It is a machine?

—Of course. It is not me.

There was a dark, doubtful moment. Then Hakon said quietly: —Let me get out, and I will show you myself.

Doubt still, and some fear and abhorrence. Then that was subdued, and Hakon could feel the strong, conscious effort that subdued it. He felt a quiver in the machine as the native stirred.

—I am getting up, said the native. But something has caught my hair.

—I must let go of you. We will lose the contact of our minds. Will you trust me? Don't be afraid.

—Very well. Come out, then.

Hakon let go the bunch of hair. His fingers were stiff and cramped, and he had to flex them for a moment. Through the broken port, he saw the native's eyes, round and blue and staring. Then the machine

rocked as it was released; and the native got to his feet.

Hakon reached up and opened the port. He pulled himself through it and crawled away from it. He stood and looked up blinking at the native's face.

He could not see himself as the other saw him: utterly smooth of skin, small, fragile, shining like an opal, his little golden eyes set obliquely above high cheekbones, his peaked lip that made him seem to be grinning constantly, the slender stalks of his antennae springing from the sides of his head, the tiny bunches of his rudimentary wings drooping from his shoulder blades like crumpled flower petals. But he saw the native's face change; although they were so different, he could recognize a smile when he saw one.

They stood for a moment, looking at each other. Then Hakon, suddenly fearful and desiring once more the contact of their minds, reached out his hand. The native held out his but it was so big that Hakon could clasp only two fingers of it.

—Elves, said the native. No one would believe it.

—Elves?

—Little People.

—I don't understand you.

—Never mind.

Shyly, a kind of warmth, a closeness, grew in both their minds. And simultaneously, the thought crystallized in both:

—Let us go to my people.

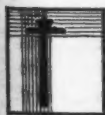
THE END



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BY P. SCHUYLER MILLER

HOW WE SEEM



HERE are signs that science fiction may be regaining its respectability in intellectual circles. A few years ago the fashion-makers, clamoring for a popular literature of ideas, welcomed SF with open arms only to back away like the summer camper who has

picked up a skunk kitten, when they discovered plenty of ideas—but ideas they couldn't understand.

As I've said before, I think "The Cold Equations" is the one story that separates the men from the boys and the sheep from the goats on this question. That part of the intellectual wing which is trying to assimilate fusion and satellites without understanding science is very loud about the inhumanity of the story, and its ethical and moral shortcomings. They're all for the dignity of free

choice, and can't understand that a law of science is fundamentally different from an ordinance against parking. They'd be all for federal legislation leveling off π at 3.0000—if they knew or cared what π is.

They dropped us about as fast as they had taken us up, and book publishers are still shuddering and calling their SF by other names, but we refused to go away. Now some of the more thoughtful of the crowd are starting gingerly investigations to find out what we're really like. Maybe we'll get back the key to the city some day.

One such study, made by the Psychology Department at the University of Pittsburgh and not yet published, took the bold and unlikely step of using a bunch of science-fiction fans as its control group. This was not so mad as it seems, for the Pitt psychologists were trying to devise a questionnaire with which they could measure people's attitudes toward rockets, satellites, and space travel in general. Casting around for a "norm" against which to test their test, they hit on the Pittsburgh Science Fiction Association as a group which would presumably be well informed about the subject—they want to know, among other things, how informed and uninformed people vary in their attitudes—and also predisposed towards satellites and moon bases.

The results aren't yet all worked out, or published. When they are, I'll try to report in full. However, it appears that we were informed and we were predisposed, and therefore

made a satisfactory check for their purposes—not an average group, but one scoring well above what they'd expect of laymen.

Study Number 2 is published, in the *Journal of Clinical Psychology* for April, 1958 (pages 107-111). It was an investigation of "Personality and Creativity in Artists and Writers," made by John E. Drevdahl, now at Oklahoma State University, and Raymond B. Cattell of the University of Illinois, while Drevdahl was getting his Ph.D. at the University of Nebraska. A more extensive working over of the results, bringing in scientists, is in preparation.

Drevdahl's vehicle was again a questionnaire, but this time one thoroughly tested by Cattell's previous personality studies. The questionnaire was sent to two hundred twelve artists and writers, of whom one hundred fifty-three returned the test materials. The unusual feature of the study is that a separate category was made for science-fiction writers. The final sample consisted of thirty-one general writers, sixty-four artists, and fifty-eight science-fiction writers.

Taken together, these three groups differed from the normal population in "being somewhat more intelligent, emotionally mature, dominant, adventurous, emotionally sensitive, bohemian, radical, self-sufficient, and of a high ergic tension level"—which, it appears, means tense and restless. They—we—were also less "cyclothymic" and "surgent" than most people, and less subject to group

standards and controls. The two technical terms, I am told, are Cattell's own jargon and I haven't been able to get hold of one of his books to translate exactly.

But what about science-fiction writers as a group? By and large, they were very close to the artists and general writers, but in one category they were way, way out beyond everyone else. SF writers are about the most adventurous crowd going. They are also quite a bit more intelligent than the others—and the general public against whom the personality questionnaire was standardized—more dominant, a little more emotionally mature—buy 'way less sophisticated, even less than the masses.

We are more self-sufficient than the others, but also more tense and restless and less stable—very close to normal. We're midway between the radical artists and the slightly radical general writers. We're the only one of the lot tested to be slightly more guilt-prone than the public: the artists and soap-opera writers don't give a damn. Although we're middling in our radical and bohemian standing—though above the average on both scores—we're less subject to group standards than either artists or other writers. We're not as emotionally sensitive as artists, but more than ordinary writers, who are more so than the mob. We're close to average on suspiciousness, but slightly less so than the average.

While the psychologists have been

studying SF writers, the sociologists have been quizzing science fiction itself.

In the *American Journal of Sociology* for March, 1958, Walter Hirsch reports a doctoral study on "The Image of the Scientist in Science Fiction," made at Northwestern University. His ph.D. dissertation, "American Science Fiction: 1926-1950—A Content Analysis," is available on interlibrary loan from the university, or on microfilm from University Microfilms in Ann Arbor, Michigan. Again, I haven't seen the complete study.

Hirsch used the 1926-1950 period because it was handily indexed in Donald Day's "Index to the Science Fiction Magazines." He broke up the period into six sub-periods, and picked fifty stories at random from the title index in Day, for each period, giving him three hundred stories in all. He then proceeded to get hold of and read the stories, and classified their content according to a system which I haven't seen.

This is, as it was meant to be, a random sample of all science fiction published between 1926 and 1950, good, bad and—I hope—some memorable. The complete thesis may list the actual titles. Hirsch admits that *Astounding*, *Fantasy & Science Fiction* and *Galaxy* have a "relatively highly sophisticated and educated audience," but he wasn't studying the best SF, but all of it. Incidentally, his estimate of six million science-fiction readers as of 1954 is way, way past Sam Moskowitz's estimate of last

year; maybe it includes comic-book readers.

Physical scientists — astronomers, chemists, atomic wizards—play the leading role in SF; social scientists have never been prominent in more than four per cent of the stories studied. Scientists as heroes fell off from forty-four per cent in 1926-29 to twenty per cent in 1946-50, and scientists as villains from thirty-nine to thirty per cent. This was probably, Hirsch believes, the result of a broadening lay audience in this period, matched by an effort of editors and writers to present less specialized characters.

Scientists were the most common villains except during the war, when businessmen edged them out. Over the twenty-four years, the rank in villainy was: scientists, businessmen, politicians and criminals. "It seems safe to state," Hirsch says, "that the often vehement attacks on the business elite and its culture that we find in science fiction is not duplicated at present in any other domain of popular culture, certainly not in the mass media."

Science-fiction writers, Hirsch feels, tend to be spokesmen for scientists and the scientific ethos. In the three hundred stories, scientists represented the "legitimate elite" in a twenty-four-to-nine ratio. Nevertheless, what Hirsch calls a "naive adulation of the omnipotent and omniscient scientist" is no longer a feature of science fiction, as it was in the early days.

The scientists in the earlier-period stories were lonewolf types, working

in basement labs; more recently, the number of independent researchers has dwindled and the number of government scientists increased. Hirsch considers this a realistic reaction to the times.

Early-on the favorite themes were the "Frankenstein" and "world-saver" routines; these have declined, and there has been an increase in themes where scientists challenge natural or divine law, or appear as martyrs. Interpersonal problems rank first today (1950), and probably reflect the maturing of SF writers; next come unanticipated discoveries and developments, which are SF's own particular bailiwick; international and interplanetary conflicts come third and fourth in popularity. There has been a general trend toward plots that are solved by the intervention of extraterrestrials, and a decline in the use of science to solve human problems.

Hirsch, as a sociologist, seems rather happy about the trends his study indicates. "Scientists are no longer either supermen or stereotyped villains, but real human beings who are facing moral dilemmas and who recognize that science alone is an inadequate guide for the choices they must make," he concludes. "The contemporary authors who may be considered spokesmen for the scientific ethos have lost the sanguine belief in the omnipotence of science held by their predecessors." Is this, I wonder, related to the many charges of anti-intellectualism and anti-science attitudes in the general public? Remem-

ber, many of the stories studied are from magazines that have been much more responsive to fan reaction than this, or the other two of the "Big Three."

There is barely room to mention a review article in *National Review* for May 3, 1958—a review of the new "Best from Fantasy & Science Fiction," written by C. Robert Morse, of whom I know nothing. He seems a friendly critic, who has read some SF before and may even like it.

Morse's conclusions will not be startling to us, but they may be to the magazine's regular audience, which would appear to be one of politically-minded intellectuals, whether left or right facing I can't say. He finds the nature of SF to be "too various and slippery" for definition . . . a distinct understatement, but an encouraging one because it means he has really looked over the field. He finds it fresh and full of surprises in contrast to the modern novel; this may be a relative newcomer's reaction, or the understanding of the old-timer. He is harder on the writing quality of these particular stories than I feel is just, but we don't know what he considers good. And he is fascinated by "The Game of If . . .," as he titles his review, and has not missed the fact that SF has an internal logic which may be that of known science, or of a postulated future science, but is there and is strict. The realistic contemporary novel simply can't play this "game of freedom," Morse says.

This is the best-informed friendly

appraisal of science fiction, by an "outside" intellectual, that I have seen in a long time.

OUT OF THIS WORLD, by Murray Leinster. Avalon Books, New York. 1958. 221 pp. \$2.75

Even an old pro like Murray Leinster must boil a pot from time to time, and he put this one on the stove back in 1947 for *Thrilling Wonder*. Berkeley's omniscient Norman Metcalf will in due course tell me what the original titles and dates were, and I could find out myself by getting ninety-nine cases of books and magazines out of the warehouse.

The book is put together out of three rather corny episodes involving an illiterate mountain repairman, Bud Gregory, who is probably somehow kin to Henry Kuttner's Hogbens. By twisting some fence wire around a rusty nail he can eliminate friction, stop neutrons cold, extract any element from anywhere, and wreak havoc with the machinations of Bad Guys. But he's lazy . . .

So a sure-enough Bureau-of-Standards scientist, Dr. David Murfree, has to act as his ambition, his integrator, his financial manager, his kick-in-the-pants. They got together when America is being mysteriously deluged with radioactive fallout . . . again when Another Power has us ready to yell "Uncle" . . . again when some nasty folk are blanketing us with "hot" dust. It's good enough fun for

twenty-five cents and paper backs, but not for hard covers at \$2.75.

TWICE UPON A TIME, by Charles L. Fontenay.

THE MECHANICAL MONARCH, by E. C. Tubb. Ace Books, N.Y. No. D-266. 1958. 152+165 pp. 35¢

I don't know why the Fontenay half of this Ace Double doesn't add up to a better story than it does. It has the best tough-guy cover painting since Rogers' portrait of Kinnison as the Gray Lensman to introduce us to Chaan Fritag of the "Deathless Legion" of interstellar watchmen. The people with whom Fritag has to deal on the troubled world of Volksweld are real, warm and likable—including the villain, Marl, who has brewed a plan for conquest in the Sirius Quadrangle during the generation since Chaan was last there. The problems of a space-rover who travels near the speed of light, so that he remains young while his wives grow old, are nicely presented. The relationships among the various time-rates are unnecessarily confused and confusing, but that's minor. Perhaps these good things are too little developed, and the action of the plot gets in the way too much. It's still a good story that ought to have been better.

"The Mechanical Monster" is a couple of levels lower on the scale. It's a pure parallel for the title story in Philip K. Dick's "Variable Man," its predecessor from Ace: a future

world ruled by a monster computer, which is thrown into confusion by the appearance of an unpredictable man from the past. In this case there is added hokum about our hero's having gained super-ESP powers from the effects of radiation, while he lay in suspended animation in the ruins of the first moon ship. Van Vogt-type stuff that is content to make impressive noises.

GUIDE TO MARS, by Patrick Moore. MacMillan Co., New York. 1958. 124 pp. \$2.75.

This tiny book is printed from the plates of the English edition, published two years ago by Frederick Muller and already in some of your libraries. It has not been updated, but it is amazingly comprehensive for its size. Unless you want a book that really lives up to the title—which would mean a translation and revision of Antoniadi's areography of 1930—this is the best quick survey of Mars as it is, that you're likely to get.

The author, an authority on the Moon and a prolific writer on popular astronomy, has always struck me as rather conservative, mainly, I suppose, because of his caustic opinion of science fiction and his snorting refusal to consider the meteoritic theory of the lunar craters, which I like. On Mars, as far as I can see, he is eminently fair, even to Lowell. He endears himself to me, a provincial who considers that the Adirondacks and the White Mountains are *really*

ASTOUNDING SCIENCE FICTION

"mountains," by citing Dollfuss' opinion that Martian relief may reach ten thousand feet, thereby dispelling the old saw of a "worn down," featureless world. He is "agin" very strong Martian winds, on the old grounds of the thinness of the atmosphere—read any Everest books lately?—and the evidence that clouds move quite slowly: but meteorologists emphasize over and over that a cloud *formation* may move very slowly, in spite of high winds. The "plume" on Everest, in fact, stands still.

And when you're being critical of astronomers for not giving us more answers about Mars, do a little calculating. They're trying to read the inscription on a worn dime at a distance of about three hundred fifty feet—more than twenty times the length of your living room. The wonder is that we know so much.

THE RETURN OF CONAN, by Björn Nyberg and L. Sprague de Camp. Gnome Press, New York 1957. 191 pp. \$3.00.

The cult of Conan the Barbarian dieth not. His loyal followers, banded into the Hyborian Legion and wearing handsome badges, meet informally at SF conventions. Now a Swedish disciple, Björn Nyberg, has opened the closed end of the Cimmerian's career with some tidying by that other delver into the unwritten chronicles, Sprague de Camp. And there's more to come . . .

This apocryphal chronicle follows

a year after the last adventures set down by Robert E. Howard, finding Conan a rather bored King of Aquilonia, dancing minuets with his slave-girl queen, Zenobia. In a moment the candles gutter, a black pall falls over the castle, and Zenobia is snatched away into the night by a flying monstrosity from—as we later learn—Khitai. Conan, ahorse and asword, sets out to retrieve her and in the process ties up all sorts of loose knots left after his earlier exploits, clear across the face of his world of butchery and black magic.

If there is less gusto than in the true chronicles that Howard set down, why, Conan is an older man, gone a little soft with kinging and slower on the uptake where the wenches are concerned, if just as invincible with a sword or dagger. Yedigerd of Turan comes to a deserved end, and Yasmina of Vendhya does not. Monsters seem less monstrous than they once were—but then, this is a natural enough consequence of the effete modernity that, as the sorcerer Pelias points out, Conan himself has brought on the Hyborian world.

I think Björn Nyberg believes in Conan more than Sprague de Camp. Maybe the reincarnation will gain strength.

THE SHROUDED PLANET, by Robert Randall. Gnome Press, New York. 1957. 188 pp. \$3.00

These are the stories about the furry folk of Nidor and the Bel-rogas

School, which appeared here back in 1956, before the new cycle beginning with "The Dawning Light"—this means there is at least one more book in the works. They tell the story of things that happened during the first five cycles—about fifty-six Earth years—after Earthmen set up the school in the name of the Great Light, and began to lead the Nidorians back to civilization.

Three members of the Brajjyd clan, in three successive generations, learn lessons that will gradually break down the wall of tradition that has enveloped Nidor since the cataclysm that crushed their civilization, five thousand years before. Kiv peGanz Brajjyd finds that seemingly academic research, properly used with scriptural authority, can save a people—and destroy an industry. His daughter, Sindi geKiv Brajjyd, makes an even greater break with tradition when she falls in love with a fellow clansman. And her son, Norvis peRahn Brajjyd, is the first to be expelled from the Bel-rogas School—the first to defy the Earthmen—the first to make a scientific and economic experiment more disastrous than his grandfather's.

Maybe it's a quibble to complain that the Nidorians are too human, in spite of their fur and their outlandish—but very systematically bestowed—names. After all, Earth chose Nidor for this experiment in education because the furry folk *were* essentially human. It's just that a little more strangeness in personality and culture would have made the subtle work of

the Bel-rogas and its faculty more impressive. Education very rarely gets its due in science fiction, except as the object of satire. It's nice to see it used as the potent force it is.

THE SPACE CHILD'S MOTHER GOOSE.

Verses by Frederick Winsor; illustrations by Marian Parry. Simon & Schuster, New York. 1958. \$3.50

Some live fan group, at some convention will sing these fabulous jingles to the traditional nursery-rhyme tunes, or a properly modernized version of them. If they do, I hope they'll wax it and tell me about it: I want the record.

It's been said that fantasy is sense with the sound of nonsense—and science fiction is nonsense with the sound of sense. Call these verses fantasy and the definition fits; call them SF, and it still fits; call 'em anything and they're still wonderful.

Frederick Winsor is a jingler—with a touch of jongleur—with a sense of rhyme that makes Ogden Nash seem pedestrian and Mrs. Danny Kaye—Sylvia Fine—tonguetied. He has metamorphosed the Mother Goose meters and themes with scientific jargon, twisted their nonsense into sense and back again into nonsense, and produced a marvel. A chemist friend who got my third copy before I could get it home says that his three-year-old loves the sound of the words. The decorations are apt and good, and sometimes very good.

ASTOUNDING SCIENCE FICTION

These publishers and the copyright injunction being what they be, I can't give you samples—just hints and statistics. There are forty-five rhymes, ranging from a few lines to the twelve page sequence on "the theory Jack built"; there's also a glossary of scientific patter, in case you don't realize quite how good some of the parodies are. There's a terrific running gag in which a rhyme based on "My Black Hen" begins in English and recurs in French, German, Swahili, Chinese, Greek and—allegedly—Egyptian hieroglyphics. The book pricks bubbles and topples towers and scribbles Steinberg cartoons on the shirt-fronts of our starchiest scientific pundits. Let's hope there'll be more.

PAPERBACK REPRINT ROUNDUP

THE OUTER REACHES, edited by August Derleth. Berkley Books No. G-116. 1958. 174 pp. 35¢. Ten stories out of the seventeen in the 1951 anthology. Three of them, by Asimov, Long and van Vogt, originated here.

THE WORLD IN SPACE, by Alexander Marshak. Dell Publishing Co. No. LB-111. 1958. 192 pp. 35¢. This excellent perspective of the International Geophysical Year followed the original edition very quickly. It has been updated so far as the Russian and American satellites are concerned, to include Explorer I. The misplaced illus-

trations that I complained about in the hard-cover edition are now in their proper places, and a shot of the Jupiter C is added.

SHAMBLEAU, by C. L. Moore. Galaxy Novel No. 31. 1958. 127 pp. 35¢. This contains three of the adventures of Northwest Smith, originally in *Weird Tales*, then collected with some Jirel fantasies in the Gnome Press edition. They are as much fantasy as SF, and more, but the title story in particular still carries a punch.

THE SKYLARK OF SPACE, by Edward E. Smith. Pyramid Books No. G-332. 1958. 159 pp. 35¢. This is the first of Doc Smith's space operas to come out in soft covers, and I hope the rest follow. It's been "revised by the author"; I haven't the original edition handy to tell you how, but presumably by updating the science and cutting.

FROM THE EARTH TO THE MOON, by Jules Verne. Crest Books No. S-216. 1958. 222 pp. 35¢. This classic has been "modernized" and "abridged," and a very good introduction by Willy Ley is added. The book, with its sequel which is included here as in most modern editions, always has been one of the most readable of Verne's tales, so it is less important that the English translation isn't new, than with some of his more dated works.

THE END

(Continued from page 105)

ber, since it's amateur-hobby work, it can't be full-time, high-speed work; we also have a living to make!—on getting together some solid suggestions for starting local chapters. If you've got the nucleus of a group, write the Interplanetary Exploration Society, 37 Wall Street, New York City. (And I repeat the suggestion that you'll need someone who has organization as a hobby!)

As of now, that first New York Chapter meeting will have someone discussing the place of the Natural Philosopher, the Gentleman Amateur, in the world today. Which of several individuals is not yet determined, unfortunately. And it looks like I'm going to present a paper—*crim*—demonstration on a new hypothesis of the mechanism of human hearing as it applies to hi-fi music. Exact date and place not established at this writing, unfortunately; if you're in the New York area, contact the IES office.

We still need another one thousand six hundred forty-five subscriptions to the *Journal*. It's my hunch like many such things, this will grow exponentially; it's getting the first beginnings that's hardest. And now that the first people have established their willingness to speculate on the success of the *Journal* . . . how about some of the rest of you joining in?

Item for amateurs in the Social Sciences: In the current cultural philosophy, it is held that it is anti-social, unkind, improper, or evil to do something effective "because I enjoy it," or "because I want to!" That is, you can play golf, or fish for stocked fish in a stream during the

legal open season, "for fun," or "because I like it." We can even have hobbies for fun. *Provided* they have no effective meaning.

But the Horatio Alger, Jr. type of motivation—doing something active and effective, that affects other people, because "I want to" is, today, held to be shockingly antisocial. The only acceptable motivations are Duty, Necessity, or Others' Need.

When did the concept that self-interest and self-satisfaction were innately antisocial gain domination? Is it a valid proposition for the human race as a whole?

The *Journal*, gentlemen, will be "for fun"—it will be "because we want to!" And it will be antisocial, because it will be with the intent to achieve something effective! And that, today, is proof of criminal intent!

Such crimes need to be committed!

Why go to the Moon? is asked frequently now. There's only one really good answer—good for the human race as a whole! *Because we want to! Not* "Because we're scared the Russians will beat us!" or "Because I'm afraid I'll lose my job if I don't think of something to do, and I need my job!"

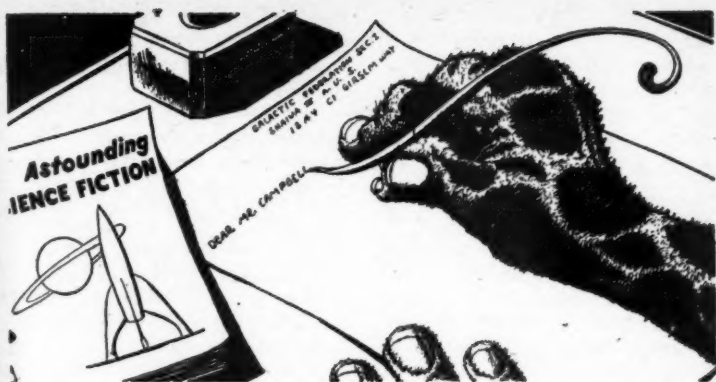
Because we want to!

Sociologists: Where did that damnable denial of the importance of wanting, of having fun, of satisfaction in achievement, get into this culture, and turn the damned thing into a rat-race? If we insist that self-fulfilling achievement is innately antisocial, obviously it's a rat-race, and not worth the trouble!

This *Journal* is going to be for fun.

Any more subscribers?

THE END



BRASS TACKS

Dear Mr. Campbell:

The Great Doctor Finnagle, who measured fourteen angstroms and a picopicoparsec between the neurons, once applied his genius to the field of organizational psychology. One law he discovered was: "An organization of the world's greatest geniuses will function with a collective intelligence which is less than that of the village half-wit."

This is due to the tendency of organizations to form policies. Policies are not a form of intelligence, but are more like reflexes or instincts. Some extremely large organizations,

he found, actually operate with an effective intelligence which may be less than that of an amoeba. For example, an army which promiscuously drafts men without regard for their feelings is much less intelligent than an amoeba which wisely tastes its food before engulfing it. — Ed Miksch, 264 N. Pleasant Street, Amherst, Massachusetts.

Yes—and a committee is a group of men who, individually can do nothing but who can, collectively, decide that nothing can be done.

Dear Mr. Campbell:

Again I must take umbrage with one of your editorials; you have neglected the most important facet of the situation in your editorial in the May 1958 Astounding Science Fiction. The reason for the malpractice laws

to be such as they are is to prevent every Tom, Dick, and Harry who has an M.D. degree from getting rich by profiting on the gullibility of the average lay individual. Non-standard research, such as you suggest on leukemic patients, has been and will continue to be carried out under the auspices of teaching centers in the hospitals where there is some control of the individual physician in a research situation.

I have done a considerable degree of clinical research myself, and I have never yet been told what I could or could not do or what was reasonable or unreasonable to do.

In view of your editorials over the past ten years on subjects ranging from dianetics to medicine, I should like to know what it is you really have against the medical profession.

Incidentally, I must say I do agree with you on one point, and that is that some of the things we believe today to be true in medicine undoubtedly will be demonstrated not to be true later on. I have often said this would be a fertile and prolific field for medical research.—Fred T. Davill, Jr., M.D., 809 South 15th Street, Mount Vernon, Washington.

Agreed that therapeutic treatment not controlled by standard medical organizations opens the risk of charlatans.

But NOT allowing therapy by extra-organizational individuals opens us to the risk of smothering creativity under orthodoxy. There is a risk—and a life-and-death

serious risk, either way. Either way! That is the crucial point—and the point elided in usual discussions of the problem.

Let us face the fact that an individual with disease X (leukemia is one of a large number of examples, actually) can, as of now, expect, if he sticks to accepted medical treatment, .98 probability of death, expenses so high as to leave his family destitute, and months of literally hopeless slow disintegration.

For the specific conditions which standard medicine knows-for-a-fact it cannot treat . . . what could a charlatan do that was more hurtful? Kill the patient? That merely shortens the period of agony!

But what might be accomplished by sincere, unorthodox, extra-medical experimenters?

With nothing to lose that is not already lost, and everything to gain—isn't wisdom entirely on the side of risking the unknown treatment which might work, rather than "risking" the standard treatment which promises near-certainty of disaster?

Note carefully one point: I hold that extra-medical experiments should be legalized ONLY IN AREAS WHERE MEDICAL METHODS ARE KNOWN TO FAIL MORE THAN, SAY, 85% OF THE TIME.

My dear Mr. Campbell:

I was very much interested in your

editorial in the June issue. I think you have gotten hold of a very vital problem to all of us—how much agreement is vital and necessary, how much is stultifying? Quite obviously, truth is stranger than fiction—fiction has to be believable, and truth is under no such obligation, it just has to be there. Not too many of us being like Humpty Dumpty, who could believe three impossible things before breakfast, fiction has to go along with our preconceptions. Now don't misunderstand me, I am not knocking preconceptions; no communication is possible without some prior agreement on symbols, which are in themselves preconceptions. (Is this creature we both perceive a sheep? or a goat? Maybe it will turn out to be neither but an intermediate form, or more sheepy than goaty but with a touch of antelope about the horns).

The question for any society or individual is in which areas will differences of opinion be tolerated. Notice I do not refer to "facts." Etymologically, fact is of course from *factum*, that which was done. Even assuming that there were eyewitnesses and they were not lying, any lawyer or any psychologist can assure you that human observation and human memory is notoriously unreliable; in spite of the ill repute of "circumstantial evidence" it is frequently much better.

Because of this we have come to accept as "scientific facts" only those phenomena that can be repeated under controlled conditions and open

to the observation of anyone who will look. That is fine for a whole class of cause-and-effect sequences in their essence repeatable, but when it comes to the study of sometimes more important ones that—did or didn't—happen but which cannot be repeated at will, we are in for trouble. These are, par excellence, the subject matter of the behavioral sciences, and of course history and archeology. "Common sense" means just what it says—how anyone else *with the same cultural background* would have interpreted the same phenomena. I stress cultural background partly from my own bias—I am working for an MA in cultural anthropology—but also because I feel it is a point too often overlooked.

Someone who reports perceiving things no one else does can be considered to be:

(a) more observant than is usual—that is if he *can* show what he sees to someone else.

(b) just plain mistaken in his interpretation of a sense impression that another similarly oriented observer would interpret differently, or that further investigation would lead the same observer to re-evaluate (example: a banging shutter interpreted as a burglar trying to break in, etcetera).

(c) a liar who is trying to pass off a false story for some private end.

(d) subject to hallucinations and in need of psychiatric treatment.

(e) haunted by ghosts, devils—possibly saints or gods—or other

supernatural beings according to the notions of such beings entertained by the society of which he is a member.

Since we all try to fit experience into our own world-view—to a very large extent culturally derived—and since it is a human trait to try to look for the simplest possible explanations, according to whatever preconceptions we hold, for any phenomenon without the hard work of rearranging our conceptual framework, we try to avoid explanation (a) as much as possible. The history of science is full of reports of occurrences that did not fit in with the "experts" views being brushed off as e, d, c, or—more politely but still somewhat stuffily—b.

You will note that the difference between d and e is *entirely* culturally determined. A says he hears "voices." X other observers also present can hear no voices. Whether one says that A is "projecting his unconscious conflicts" or that he is "haunted by supernatural beings"—both of these are explanations and interpretations—rationalizations if you like—determined by which view the onlooker finds most believable. You could also call A a pathological liar, or decide he was exceptionally gifted with psi powers, or even that he had exceptionally keen ears and heard conversations at a distance no one else was able to.

It would make a lot of difference to A, of course, which view prevailed—I mean, he might be burned as a wizard, venerated as a saint, scorned

as a deviant, pitied and/or feared as a madman, listened to as an oracle, cured of his conflicts by psychoanalytic treatment—you name it, some society or other has tried it. But essentially it is the recurrent problem of how to handle someone who states with passionate conviction that something exists because he has perceived it himself—something which no one else can perceive at all or explain satisfactorily.

Most of us have such moments occasionally, but we are better adjusted to our societies and if everyone tells us we *couldn't* have seen what we are subjectively aware that we did, we are willing to settle for b rather than run the risk of being assigned c or (worse) d or e. But we usually remember what we thought we saw, none the less, and when someone comes forward with a "respectable" explanation that will make us an a rather than a b we seize on it gratefully. Thus it is quite common, for example, in any science as soon as any phenomenon is accepted as possible or probable to be overwhelmed with a mass of evidence from all sides—people who had actually observed the phenomenon in question, often had made notes on it, but because it didn't fit the then current notions of the "possible" had set it aside as b.

How many people must agree before a thing becomes a "fact?" You tell me. There is safety in numbers, of course, but I never heard there was any guarantee that because most people in a society interpreted things

in a certain way, it was necessarily a "correct" explanation—anyway outside that society. You can talk about "normal" human beings as much as you like, but apart from its statistical sense, normal has very little meaning; are you a normal, average human being? You are? You mean *exactly* like all other normal average human beings? How abnormal can you afford to be seems to me more to the point, especially as one society often regards as desirable personality patterns another society would find intolerable, as well as accepting explanations quite outside the framework of belief of another—Charlotte O. Gill, 2501 Waverley Street, Palo Alto, California.

I particularly like that comment about truth necessarily being stranger than fiction!

Dear Mr. Campbell:

Concerning your comment on Isaac Asimov's letter on American anti-intellectualism—ASF of April, 1958—your suggestion that "if everybody believes it, there must be some truth in it" should, I'm afraid, be added to the list of typical un-intellectual ideas. For a much better argument than I could possibly write, see the article in that same issue of ASF—"Living Fossils in Print," which lists several cases of fictions which everybody believes. One of the characteristics of an intellectual—if there is such a thing as a standard "intellectual"—that may in fact account for

some of the feeling against him is that he is quite willing to question something that all of his contemporaries "know" to be true!—Stanley Zisk, 5 Caswell Avenue, Newport, Rhode Island.

Please note I said that there "must be some truth in it," not that it must be true! Every legend has some truth behind it; the problem of the true thinker is to find the small fraction of truth and concentrate it to usefulness.

Dear Mr. Campbell:

Who is this Randall Garrett? I presume he is not Isaac Asimov under a *nom de plume*, but surely Asimov must have been consulted in the writing of "No Connections," the title of which, as well as the material, recalls the work of the Master.

At any rate, the student or plagiarist, as you will, did a worthy job and I hope to hear more from him in the future. I particularly enjoy these long-range views of human civilization represented by the *Fondation* saga, and suspect that they do more to produce a favorable mental environment for this age of deadly suicidal weapons than all the deliberations of the Security Council.

And I hope to Allah—or whatever diety the ASF fans can invoke—that these dreams do materialize in some form, some day.

I cannot endorse the argument that barriers to communication, directly

and of themselves, improve the rate and originality of discovery. The spurt of today is not the direct product of communication barriers, but the result of deadly power competition which—less directly—is both the cause and the result of such barriers. Naturally a power race is going to stimulate each and every effort that can possibly lead to power, and in this sense a barrier may produce a spurt in technology. Indirectly.

But please note, Mr. Campbell, that the modern age of Progress began when, and only when, the first mass-communication proceeded to destroy those barriers to communication. And for four and a half centuries after that, communication barriers were a sure way to cripple your society in the scientific and technological race. Not until the advances of social science had made such nicely-graduated controls possible as police states use, was it possible to separate the barriers which were technological-ly significant from those which were socially significant. The practical application of this discovery marked the end of the Age of Liberalism.

At the same time, I do agree with the usefulness of Gentlemen Amateurs and the fresh viewpoint. Only—we don't need communication barriers to achieve this. The mortality

of the species provides all we will ever need of such—and future advances will profit more from better communication between minds, than from less.

This is, in fact, one of our great dilemmas, or Hobson's choices. For the less our communication, the more its place is filled by the exceedingly dangerous dynamic of power competition. Yet the better our communication, the faster the race plunges into new and uncharted discoveries with new and uncharted effects. Einstein was only the first of many such discoverers who will awaken to horrified realization of what his discovery has meant.

The international power race is frightening enough, Heaven knows. But inside our own society the disintegration of cultural controls is evidence that even without international problems, the race has no idea of where it is going. All it knows is that it is going there mighty fast, at an accelerating pace—with no brakes fit to mention.

Your move, Mr. Campbell!—Alfred B. Mason, M.D., U.S.N.A.D., Concord, California.

Garrett quite deliberately used Asimov's background. Re-read the first sentence of Garrett's story!

THE END

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

(Continued from page 5)

ful sense, of finding a common course of action more valuable to each, than any individual course could be.

It amounts, simply, to recognizing the very ancient concept of Contract; the Law holds that a valid contract must provide predictable benefit to *both* parties.

The anathematized concept of Profit, it just happens, is a fundamental necessity in a universe where the Law of Conservation of Energy exists.

But the fact that the concept of "both parties must profit" is not unnatural implies that we, as human beings, recognize that it is not necessary for A to suffer, if B gains. That "exploitation" can exist—but that "profit" and "exploitation" are not necessarily concomitant results.

Currently, France seems to be disintegrating because each warring group insists that "profit" and "exploitation" are the same . . . and each wants to be the one to profit.

There is, however, an even more dangerous form of dividing things—and one which is, unfortunately, peculiarly desirable to human beings. That is the division of Authority and Responsibility. The old saying "Power corrupts; absolute power corrupts absolutely," is not valid. It isn't *power* that corrupts—it's immunity.

The thing that makes the juvenile delinquents so successful in their viciousness is not that they are so powerful; it is the fact that the JD can sneer at the arresting officer, "Ah,

so what! Keep your hands offa me—I'm a juvenile, see!" and know that the law does, in fact, give him immunity. It isn't that he is more powerful than the adult police officer—it is that he is legally immune, while the police officer is not.

Naturally, we have labor racketeers; Labor has been given special legal immunities. Where would you expect to find corruption growing, but in an area of legal immunity?

The thing we all want, of course, is Authority—which is the ability to release power into action—and Irresponsibility, immunity from consequences of the use of that Authority.

The ability to Impose, without Being Imposed On. To Order, without Being Ordered. But, after all, if only we had absolute immunity from responsibility, reprisals, or consequences we didn't want . . . it would take very little Authority to accomplish almost anything.

Any infant demonstrates that; the baby's only power is the very slight one of making a crying noise . . . but it has almost absolute immunity. Consequence: the baby runs the household. One need only to have power enough to irritate—absolute power is not necessary—and absolute immunity to achieve the status of absolute tyrant.

In "Martians, Go Home!" a while back, Fred Brown exemplified the situation. The "Martians" of the story were little visible, but intangible, green men; they could do nothing whatever except observe and make

"... BUT DIVIDED WE FALL!"

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comments. But they were absolute tyrants, because they were absolutely immune. They could insult, but not be insulted; they could invade privacy, but their privacy was inviolable.

The most destructive separation of all, is separation of Authority from Responsibility. It has all the wish-fulfillment attraction of a narcotic drug, one that yields a sense of satisfaction without sacrifice of time, effort, or disciplined thought. And like a narcotic drug, it's both habit-forming, and destructive.

There is, in the United States now, a sharply rising trend toward separation of Authority and Responsibility—accompanied, of course, with a ris-

ing tendency toward rejection of values held in common by all citizens.

When Labor holds that Management and Politics are, properly, servants existing that Labor may be taken care of . . . then Labor holds that, properly, they have Authority to command, but are not responsible for seeing that the commands are possible.

When Politics holds that Labor and Management exist for the service of Politics . . . then they hold that their Authority is proper, but that Labor and Management are responsible for carrying out the consequences.

Currently, Management doesn't have any standing, and no Authority

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—it's been given total responsibility, however. Who is to pay higher wages, and higher taxes? Management, of course. And who is to keep prices down, and prevent inflation? Management, naturally. Who decides what Management is to do? Labor and Politics, of course, determine the broad outline policy—the details of how to carry out the impossible assignments is, of course, the responsibility of Management.

Management's job—responsibility—is to raise wages, pay the higher taxes of the nation, and reduce prices.

The railroads, for instance, show a fine example of what happens. The

politically dominated Utilities Commissions set the railroad rates, while the Railroad Brotherhoods determine the wages paid and the State governments set the taxes. Who runs the railroads?

Yes . . . but who is held responsible for the railroads? Management, of course. The Management that can neither determine what rates to charge, what wages to pay, or what taxes to pay. The Management that can't determine methods of operation—the Utilities Commissions determine what trains the railroad must run, whether the train makes money or not. The Railroad Brotherhoods determine working hours, methods, and operating techniques. Intercity buses

"...BUT DIVIDED WE FALL!"

may run with one-man crews . . . but not a railroad.

It makes a very interesting situation. The railroads don't introduce modernized equipment; they continue using out-of-date methods, inefficient equipment, inadequate service is offered, and uncomfortable passenger facilities. While buses are modern, fast, comfortable, and air-conditioned.

Sure . . . but the change-over to modern, efficient, lightweight equipment involves changing operating techniques, and a major capital investment.

No sane entity invests in an enterprise which cannot predictably yield reward—and as of the present time, it can be predicted that railroads will continue to go bankrupt repeatedly until such time as they are taken over by the governments. Then, of course, with Management eliminated, Politics and Labor can battle the Authority-Responsibility problem out between themselves. As of now, the Brotherhoods won't allow the violent shift of operating techniques involved in establishing efficient service, with the necessary elimination of tradition-hallowed featherbedding practices—and no one wants to invest the capital needed to establish a modernized system until operating practices are modernized.

The telephone companies have an interesting problem, too. The telephone rates are fixed by Utilities Commissions; they are fixed by consideration of actual operating expenses, and the concept of "a fair return on investment." The rates,

once fixed, remain that way until the Commission authorizes a change.

Now suppose the cost of living rises, and the telephone workers need a raise.

The company can't possibly give one; their situation has been studied by the Commission, and any financial cushion in the operating costs vs. income has already been carefully pruned to the smallest possible. (The Commission is politically appointed; people don't like to have their telephone rates high, and the Commission wants to please them. On the other hand, telephone company stocks are among the guaranteed-income group that banks, trust funds, insurance companies, and private individuals rely on. Cutting that return would be definitely unwise, and extremely hard on a lot of individuals and groups who need the stability it represents).

The familiar result is the telephone strike.

It works this way: the company *cannot* give a raise in wages; the Commission has already seen to that.

The workers need the raise.

The Commission can't grant a rates-raise unless the public is made to understand that it is a necessary, however distasteful, step.

So the workers strike. Presently telephone service gets more and more fouled up. This hurts the public directly; the public gets more and more annoyed—angry enough to start howling for someone to do something. Naturally, it's obviously the fault of Management, which is being too

stubborn to grant workers who need a raise the necessary increase.

When the grumbling and complaints get loud enough to show that the public is aware that a raise is necessary, then the Commission can grant the telephone company a raise in rates, and make possible the raise in wages.

After much fuss, furore, inconvenience, and discomfort, the obviously necessary is finally achieved, and everybody goes back to work, somewhat the poorer, and with much less satisfaction in doing a needed job well.

The Commission isn't too worried: it's the workers and Management that get blamed for causing all the trouble. The Commission appears in the role of the Someone who stepped in and got Something Done.

Everybody loses . . . except the idea of Control By Committee. It certainly *looks* as though the committee idea was good; wasn't it the Commission that finally settled the matter?

Sure . . . and who, in essence, caused the problem in the first place?

Oh . . . we shouldn't ask that, huh?

Let's ask it anyway.

And currently, there is, in the United States, a rising tendency to seek not Power—but Immunity. Power is achievement, and is not in any sense whatever a corrupting influence. True, the Power-seeker is aggressive, and appears on the surface as the cause of trouble.

"...BUT DIVIDED WE FALL!"

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But consider the completely non-aggressive individual who isn't doing a thing . . . except sitting there, immobile and immovable, smack in the middle of the only possible road. Certainly he can't be accused of being aggressive, can he? He isn't doing a thing!

The Power-seekers have one thing in common; they are all seeking higher achievement. In that, they can be united, and co-operative.

It's the Immunity-seekers who, because they seek nothing beyond themselves, are the utterly, absolutely, and permanently intransigent, unco-operative people. There is no way to induce them to unite; they have no goals beyond what they already have,

no wish to sacrifice anything they have for any other value.

Unless a people accepts a goal external to Now, unless there is a high purpose lying ahead of all of us, a Will, a Value, a Purpose or an Achievement higher than any and/or all of us—something which pulls us with an attraction to which none of us is immune—there can be no co-operative endeavor, and no compromise.

Russia, which did not exist as a national entity forty years ago, has discovered a common purpose. It matters not at all whether you call that purpose a good one or a bad one—it's a purpose. And the people are sacrificing individual and small-group desires to achieve a greater goal.

The United States came into existence because there was a sense of purpose and achievement-to-be-won.

We're in an exceedingly dangerous position now. All over Russia, there are signs "Overtake America!" They're doing it. Doing it honestly, by hard, genuine work, and solid effort.

Our own government has definitely misled us—and our American free press has been working on free hand-outs from the government, rather than following the old tradition of getting, and publishing facts.

Item in proof of that statement: When Sputnik I went up, it came as a shock and surprise. None of the scientific installations designed to track the Vanguard satellites were

able to receive the Sputnik transmissions, and frantic, hasty rebuilding was required before any of our stations could track Sputnik I. (The radio hams did more than our official stations in the first days; they had equipment on forty megacycles within hours).

This was an absolutely inexcusable, criminally stupid situation. For months beforehand, Russia had been officially publicizing the exact frequencies they intended to use on their scheduled Sputniks.

Today, the people of the United States are showing a marked unwillingness to acknowledge the fine achievements of another people—to acknowledge honestly earned, well-deserved achievement. And that is exceedingly dangerous indeed. If you fail to acknowledge another man's accomplishment, while he acknowledges yours in full . . . he is learning all you learn, but you are refusing to accept that he has anything worth learning.

Can you, today, name a common, positive goal toward which all Americans strive? A *positive* goal—one not-yet-achieved.

There is one thing nearly all Americans today agree on, of course; Preserve the American Way of Life.

Pickle it, perhaps? Embed it in plastic? Can it? Place it in a museum case, where we can all look at it and admire it?

Anything you preserve has to be dead first.

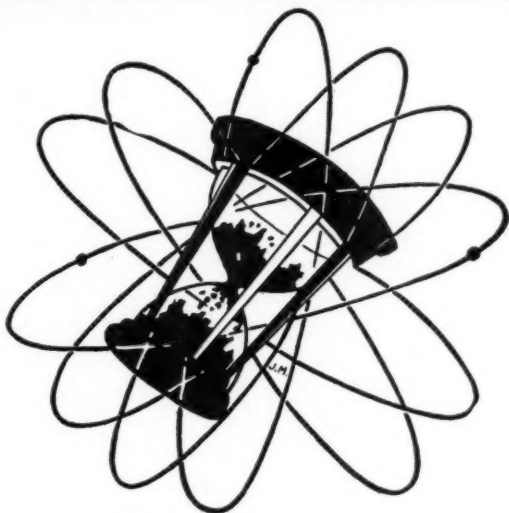
The Editor

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